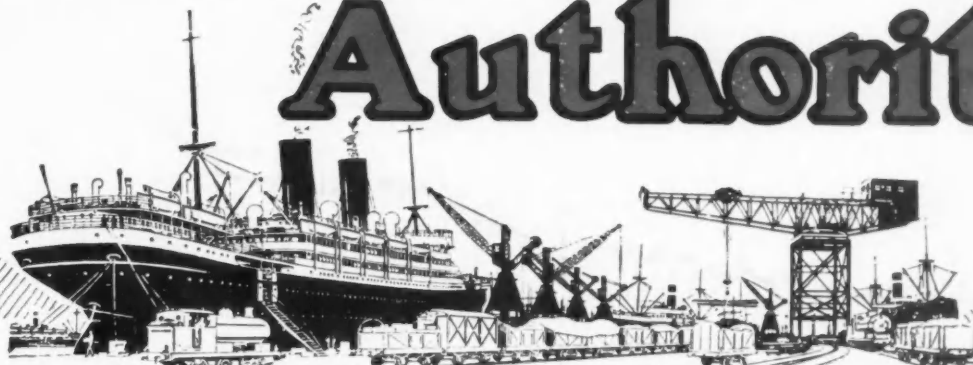


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The Dock & Harbour Authority



No. 183. Vol. XVI.

JANUARY, 1936

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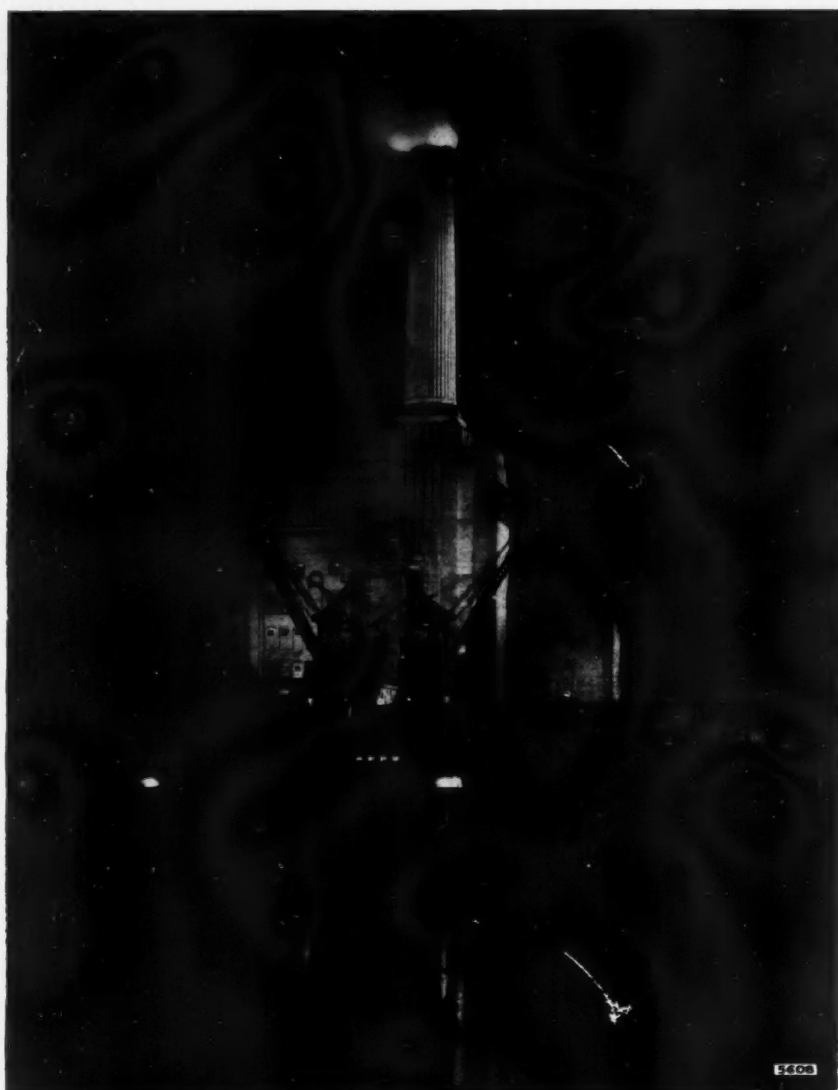
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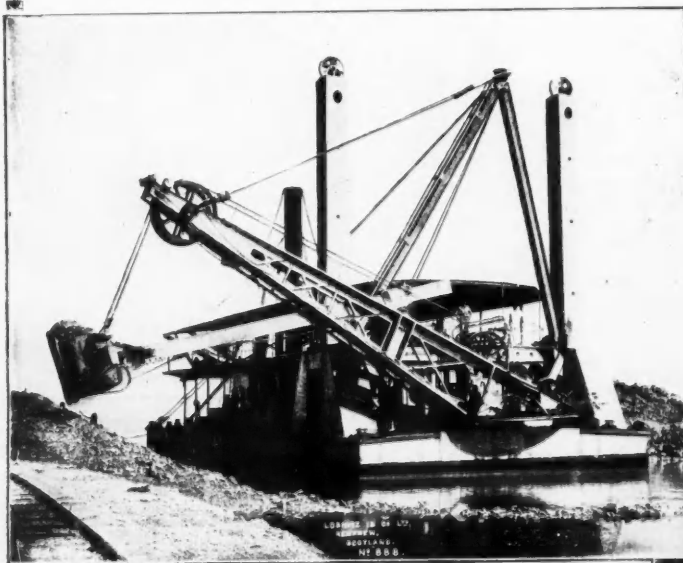
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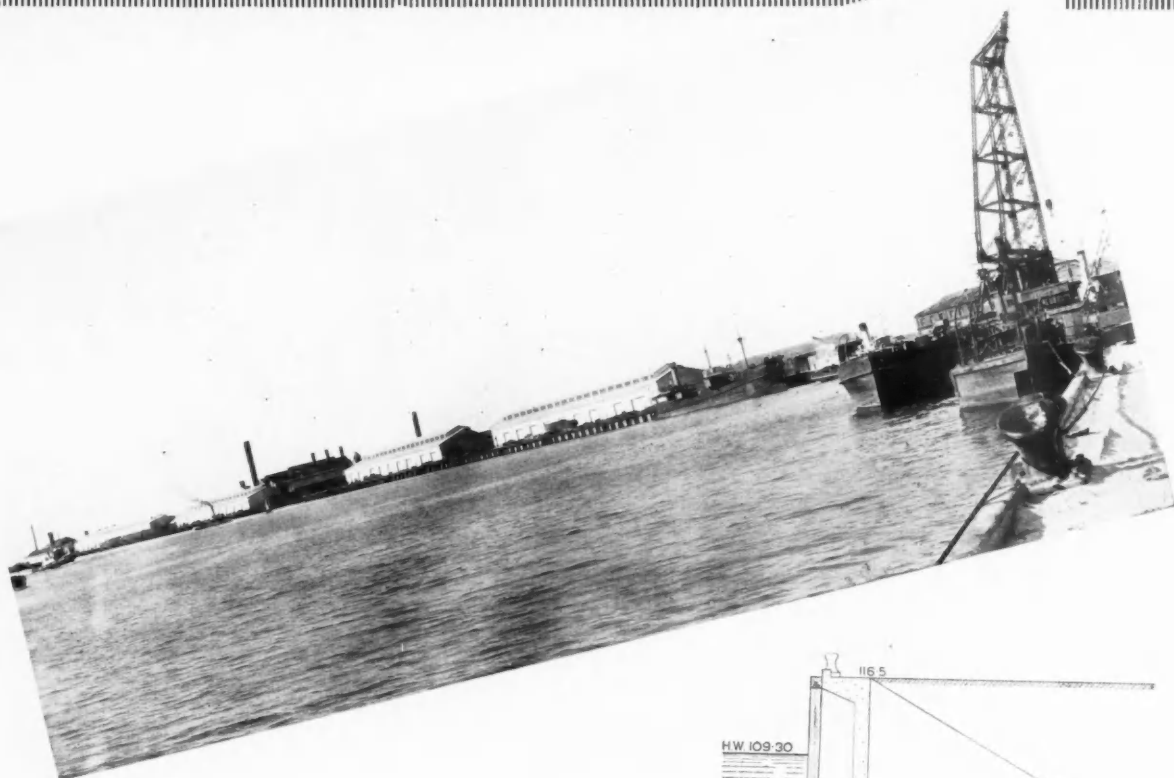


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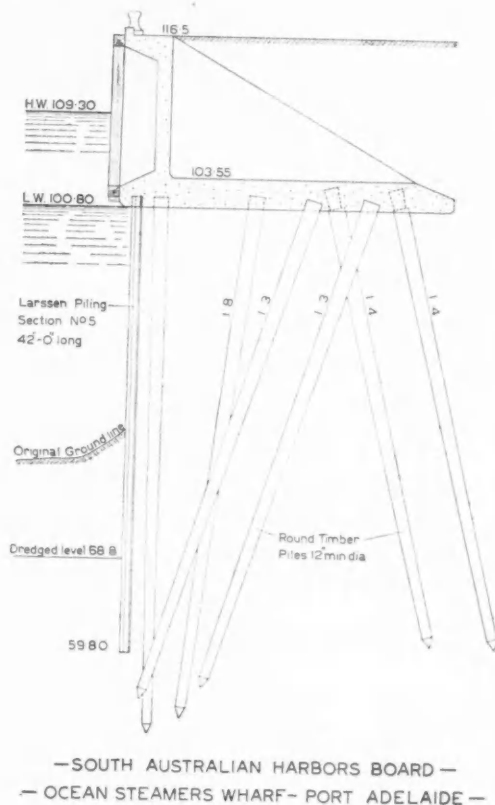


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Contributions which are to be paid for must be clearly marked thus; otherwise they will be considered gratuitous

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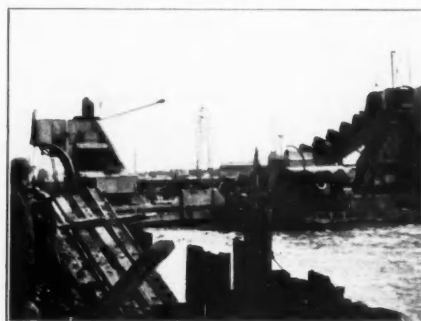
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THE DOCK & HARBOUR AUTHORITY

No. 183. Vol. XVI.

JANUARY, 1936

Editorial

The Port of Gdynia, Poland.

The Port of Gdynia, which is to-day the principal port of Poland, is a comparatively new port, it only having been constructed since the completion of the Great War. In the few years that have passed since its completion the trade of the port has gone ahead by leaps and bounds and has most certainly justified the expenditure incurred in the port's construction.

The port to-day consists of an outer harbour and an inner harbour connected by an outer basin which leads to the main entrance from the sea. The outer harbour includes three large basins known as the Coal Basin, the South Basin and the President's Basin, and which have been formed by the construction of four piers known as the Passenger Pier, the Coal Pier, the Fishing Pier and South Pier. The inner harbour consists of a port canal and two inner basins known as Marshal Pilsudski's Basin and Minister Kwiatkowski's Basin.

The construction of the port was commenced in 1924, and at the end of 1935 the work had reached the following stage:—Length of breakwaters constructed, 4,255 metres (13,917 ft.); length of wharves in use, 12,218 metres (39,963 ft.), with a depth of 6 to 12 metres (19½ ft. to 39 ft.); number of cranes installed 58, with a total tonnage of 231.5; area of harbour warehouses in use 190,000 square metres, and the length of railway track on the harbour site 168 kilometres (104 miles).

The trade of the port has increased each year since its opening, with the exception of 1932, when there was a slight setback in imports, which, however, form only a very small portion of Gdynia's traffic, the bulk of the trade being confined to exports.

In 1928 the Port of Gdynia handled 192,712 tons of imports, and this figure had risen to 991,545 tons in 1934. Exports in 1928 amounted to 1,765,058 tons, and in 1934 this figure had increased to 6,200,368 tons.

An illustrated article on the Port of Gdynia appears in this issue, and Gdynia also forms the supplement for this month.

Manchester Ship Canal Company's Bill.

In the Bill the Manchester Ship Canal Company is promoting, power is sought to deal more effectively with the difficulties created whenever any vessel is sunk, stranded, or abandoned in the canal. The law as to compelling a sunken or abandoned vessel to be removed or blown up, and the recovering of costs incurred from the owner of the vessel, appears to be unsatisfactory from the point of view of canal undertakers and harbour authorities.

Another clause of the Bill relates to certain tidal openings in the estuarial section of the canal. When the canal was first opened, certain openings to tidal waters were made, chiefly because the conservancy authorities of the River Mersey had doubts about the effect of the canal works on the river channel. It was soon discovered that the tide brought great quantities of mud into the canal. The Ship Canal Company obtained powers to close these openings with wooden structures that could easily be removed.

This was more or less an experimental course, the idea being that if the filling up of the tidal openings had any ill-effect upon the River Mersey they could be removed with comparative ease and relatively little expense. The Company considers that time and experience have shown that the temporary filling in of the tidal openings does not cause interference with the Mersey channel, and that if at any time these wooden structures should need replacement there should be power to erect barriers of a more permanent character. Such barriers will have to be approved by the acting conservator of the Mersey.

The Company also seeks powers to construct over three miles of new railway and to fill up and abandon the virtually derelict Manchester and Salford Junction Canal, for the maintenance of which it is at present responsible.

Annual Meeting of Hull Chamber of Commerce and Shipping.

At the annual meeting of the Hull Chamber of Commerce and Shipping the retiring President (Mr. G. F. Earle) regretted the absence of any figures of the total tonnage of all commodities handled at the Port of Hull. Only values were available, although other leading ports seemed to be able to assess total tonnages as well. This he commended to the notice of the Port Authority. However, in terms of value imports had declined from, roughly, £51 million in 1931 to £42 million in 1934. As far as could be seen, imports of raw materials were more or less maintained, so that manufactured articles imported must account for the decline. Exports, however, had increased in the same period from £19.6 million to £22.1 million, and re-exports from £835,000 to one million. The tonnage on which dock dues were paid increased from 5½ to 5¾ million net tons. On balance, it would appear that Hull as a port had made some progress since 1931. Whether it had progressed at the same rate as inland centres was another matter. Hull, apparently, had maintained its share of the sea-borne trade of the United Kingdom, but little evidence was available to show that local commercial interests had sustained any considerable benefit either from trade agreements with foreign countries or from the Ottawa agreements with Empire countries. On the contrary, added Mr. Earle, Hull would appear to have been rather neglected.

The failure of the coal export trade at the Humber ports to expand and the spectacle of appliances at the docks for the most part idle; or at least, being worked at under 50 per cent. of capacity, are giving rise to continued anxiety. At the beginning of December the exports (foreign) from Hull, Goole, Grimsby and Immingham taken together had reached the total of 3,074,751 tons, or within 17,000 tons of the figure at the same date in 1934. This is a million tons less than in 1931 and over three million tons behind 1929 and 1930. Surely, said the Lord Mayor at the meeting of the Hull Chamber of Commerce and Shipping, Hull could not afford to lose these millions of tons without continued and urgent protest! Various efforts have been made to overcome certain difficulties arising out of the operation of the Coal Mines Act, but the Humber coal exporters remain strongly of the opinion that nothing short of fresh legislation and the freeing of coal for shipment from all quantitative and price control can adequately meet the situation and enable the coal export trade of the Humber and elsewhere to recover lost ground.

The imports of timber, hewn and sawn, at Hull to the end of November amounted to 997,000 loads, and were thus 120,000 loads less than in the corresponding eleven months of 1931. It is now certain that the million line will be exceeded for 1935. The Scandinavian and Baltic timber exporting countries have come to an agreement to reduce production in the coming season by 20 per cent., equal to 500,000 standards, but this does not necessarily mean that imports at Hull will also be reduced, since they depend entirely upon the state of demand in this country, which at present is remarkably good.

Why Not Government Aid?

Sir Alfred H. Read, chairman of Coast Lines, Ltd., at the 32nd annual dinner of the Liverpool Marine Engineers and Naval Architects' Guild, said:—

"We must have complete up-to-date facilities at the various ports of the United Kingdom. The four big railway units are about to receive, through the assistance of the Government, a very large sum of money to bring the railway systems up to date. Why should not the ports go likewise to the Government? Money is cheap—never been cheaper—and why should not the ports borrow money at a cheap price and bring the ports up to 100 per cent. efficiency? Such expenditure would provide work for large numbers of unemployed, who could thus be taken off the dole."

Notes from the North

Liverpool Landing Stage.

OWING to the falling off in the Mersey ferry goods traffic since the opening of the Mersey Tunnel, the Mersey Docks and Harbour Board has decided to re-allocate the berths at the ferry goods stage, and to lengthen the Prince's Stage. Three berths are allocated to the ferry goods traffic, but two of such berths will meet the present requirements. It is therefore proposed to add a portion of the ferry goods stage to the Prince's Landing Stage. This will enable two large liners to be berthed at the Prince's Stage at one time without the difficulty which sometimes arises now. This move will undoubtedly prove a convenience to the steamship companies concerned at busy week-ends. The Prince's Landing Stage will be lengthened by about 150 ft., and when this has been done the stage will be 1,521 ft. long.

Mersey Bridge to be Freed from Tolls.

Mersey Docks and Harbour Board and the Birkenhead and Wallasey Corporations have come to an agreement with regard to the freeing of the Poulton Penny Bridge from tolls, and, subject to the completion of an agreement and the approval of the Transport Minister to a grant of 60 per cent. of the cost, the work on the approach roads is to be carried out.

It is proposed that the cost of reconstructing the approach roads should be borne in the proportion of 60 per cent. by Birkenhead and 40 per cent. by the Wallasey Corporation, less the grant from the Ministry.

It is estimated that Birkenhead's share of the cost will amount to £6,075 of the total, which is estimated at £10,290, but with the grant, the total cost to the town will be £2,430, on which the annual capital charge will be £181.

At a conference between representatives of the Dock Board and the Corporation, the question was discussed of the construction of river walls and embankments on Tranmere foreshore—in connection with which it is proposed to extend the time for the completion of the work to 1950. It is proposed that the Birkenhead Council and the Dock Board approach the Government jointly with a view to obtaining a grant towards the cost of building the walls. In the event of a grant being made, it is suggested that the Dock Board be requested to proceed with the work of reclaiming the foreshore as soon as possible.

At the same conference, the question of municipal representation on the Dock Board was discussed. The Parliamentary Committee recommended the Birkenhead Council to instruct the Town Clerk to communicate with the Corporations of Liverpool, Bootle and Wallasey on the subject, with a view to steps being taken to obtain representation.

Morecambe Old Harbour.

Morecambe Old Harbour Committee has formed a sub-committee to consider a suggestion for the use of the old harbour by yachts, involving the construction of a wall between the stone jetty and the wooden pier, leaving an entrance for craft.

Investigation into Sewage Discharge.

The investigation by the Department of Scientific and Industrial Research to ascertain the effects of the discharges of crude sewage into the estuary of the River Mersey on the amount and nature of the silt and other solid matter deposited in the estuary, is dealt with in the report of the Water Pollution Research Board. The deposition has for years necessitated extensive dredging, and the subject is of great importance to the Merseyside local authorities and the Mersey Docks and Harbour Board, who are bearing the cost of the investigations.

The Mersey Docks and Harbour Board has made systematic hydrographic surveys of the estuary in 1861, 1871, 1881, and then every five years to 1931. The records of these surveys and other hydrographic data available have now been examined in detail to ascertain the limits of accuracy of the methods of survey adopted and to follow the changes which have occurred from time to time in the shape, area and depth of different sections of the estuary.

From various data supplied by the local authorities in the Mersey area, it has been estimated that the total quantity of crude sewage discharged into the estuary is of the order of 40,000,000 gallons per day.

From the entrance of the Narrows, near Liverpool, to Garston, the banks on both sides consist almost entirely of walls of concrete. On the Cheshire side, from Eastham to Runcorn, there is the retaining wall of the Manchester Ship Canal, adjacent to the principal bank of mud. Erosion of clay cannot, therefore, occur to any great extent from the shores of the estuary from Formby to Garston on the Lancashire side or from the River Dee to Runcorn on the Cheshire side.

It has been found that the bed of Liverpool Bay is mainly sand, and with some patches of mud or clay containing organic

matter. The samples from the Irish Sea also contained clay and organic matter.

Unloading of Explosives.

Mersey Docks and Harbour Board has decided, subject to the approval of the Ministry of Transport, to amend the bye-laws so as to extend the hours during which explosives must be loaded or unloaded in vessels in Crosby Channel, the object being to obviate the detention of ships in exceptional cases.

Glasson Dock.

A system of flood-lighting on the quays at Glasson Dock, near Lancaster, now enables boats to discharge day and night. At the official inspection of the electrical installation, Mr. J. Nicholson (Lancaster), suggested that the introduction of electricity might further the port's progress. Nothing had been done to help the dock for 80 or 90 years, and he thought Lancaster Council might take a hand.

Liverpool Landing Fees.

Mersey Docks and Harbour Board has made application to the Ministry of Transport for approval of new fees in respect of passengers landing from pleasure cruises. Hitherto, the companies have paid 2s. for each adult first and second-class passenger from pleasure-cruising liners, and 8d. each for the third-class passengers, with half-price for children. Now it is proposed that 1s. should be paid for each adult passenger, irrespective of class, and 6d. for each child.

Dock Gate Blown Down.

During a recent gale at Liverpool, one of the river entrance dock gates of Salisbury Dock, Liverpool, was carried away. When the tide ran out the dock was practically emptied. Until the gate was repaired, the missing part of the gateway will be replaced with a caisson.

Dock Board Seeking New Powers.

Mersey Docks and Harbour Board is promoting a Bill in Parliament to secure the following powers:—

- (1) To extend the period for the completion of the river walls or embankments (No. 1) and (No. 2) and the river walls or embankments (E) and (F) part of the northern extension works.
- (2) Enlarge the powers of the Board by leasing, letting or demising land and warehouses and the sites of warehouses.
- (3) Provide that the expression "the Port of Liverpool" shall mean the Port of Liverpool as existing at the time of the passing of the intended Act.
- (4) Provide that the words "vessel" and "ship" shall be extended to include a pontoon and a flying boat and any other aircraft designed to float or manoeuvre on the water (hereinafter referred to as "seaplane"), and that in the existing Acts the expressions "steam vessel" and "steam boat" shall include any vessel designed to be wholly or mainly mechanically self-propelled.
- (5) Make provision as to the rates and other charges to be levied by the Board in respect of seaplanes entering or using or leaving that part of the Port of Liverpool which lies seaward of an imaginary line drawn across the River Mersey from Eastham Ferry Slip to the north-western corner of the South Pierhead of the entrance to the Garston Old Dock, including any of the docks of the Board situated seaward of that line and in respect of goods and passengers loaded or embarked on, or unloaded or disembarked from any such seaplanes.
- (6) Make provision for the formation and maintenance by the Board of a sinking fund in respect of past and future capital expenditure.
- (7) Empower the Board, if they think fit, to appoint a deputy-chairman.
- (8) Provide that polls for the election of members of the Board shall be taken only within the City of Liverpool.
- (9) Provide that when the Board raise, destroy or remove any vessel not chargeable with, or habitually excepted or exempted from, dock tonnage rates and harbour rates which is sunk or stranded in any dock of the Board or elsewhere within the Port of Liverpool or any of the sea channels leading thereto, or the wreck of any such vessel, or the cargo of any such vessel or wreck, they may recover from the person who was the owner of such vessel at the time the amount or part of the amount of any duties and expenses paid or incurred by the Board.

North-East Coast Notes

About the Coal Trade.

A WELCOME item of news at the end of the year was the statement that British coal exporting districts would benefit by a 10 per cent. increase in the French import quota which came into effect on December 1st. The increase was estimated to represent about 50,000 tons, but as South Wales claimed that about half that amount would go there, the effect in other districts, like the North-East Coast, obviously could not be great. Still, it might to a small extent counteract the loss sustained in all coal-exporting areas by the decline in shipments to Italy. This latter factor has been serious, and so far as the North-East area is concerned, has had a very detrimental effect on trade, particularly in Durham. Official figures given a little while ago showed that while from October, 1934, to September, 1935, the total shipments of British coal to Italy were 4,310,931 tons, the corresponding figures for 1933-34 were 4,520,376 tons, a very considerable decline. In September this year 157,523 tons were sent to Italy, but in October the quantity had fallen to 105,000 tons, and later figures will display greater decreases still.

Tyne Commission's New Chairman.

A change was made in the chairmanship of the Tyne Improvement Commission in November last, when Sir Arthur Sutherland succeeded Mr. H. P. Everett, who had occupied the chair for five years. Sir Arthur Sutherland, who has been a member of the Tyne Improvement Commission for 24 years, had acted as deputy-chairman for five years. Mr. Everett, in proposing the election of Sir Arthur, said: "My ten years may be said to have covered one of the most trying periods in the history of the Tyne, if not in the history of the country. At one time the position became very serious. The river was full of idle shipping—the figure reached 180 steamers of nearly one million tons of carrying capacity, but is now reduced to 37 boats of about 200,000 tons carrying capacity. Our coal shipments declined, as also did our imports, and, consequently, our revenue also dropped seriously; our debt bore high interest, and economies could not be put in hand immediately. But in time all our difficulties were tackled." Continuing, he said, it seemed that the tide has turned as during the second half of this year shipments began to improve, the rate of interest was gradually lowering, and the effect of economies was beginning to be felt. "Prospects are undoubtedly better," he said, "and I hope and believe my successor will have a good report at the end of his first year."

Sir Arthur, on taking the chair, said he took up the reins of office when there was a promise of a return to a greater prosperity than when Mr. Everett followed the late Lord Kirkley in the chair in 1930. "To-day," he said, "indications are fairly definite that the worst of the trade depression is over. The coal trade, however, is not so good as it was last year, but there is a reason which accounts to some extent for the shortage, namely, the international situation between Italy and Abyssinia. We look forward to the time when Italy may be able to return to normal trading with us. International agreements have proved to be of benefit, and Government action to preserve the economic status of Great Britain has been effective. One outcome of that action has been to provide cheap money which has assisted to re-establish industry. It has also been of great value to this Commission because the Commissioners have been enabled to secure whatever money they have required for the purpose of their undertaking at a rate which shows a substantial saving on the value of money which obtained prior to June, 1932. The Commission has played its part in helping industry. It has provided, and is now providing, facilities to meet the requirements of expanding trade. I feel sure that the policy of steady progress will be maintained. There are schemes in that direction now in the minds of the Commissioners. Let us hope they will be realised in the near future. Next year the banks of the Tyne will have a busier appearance than they have had for many years. Jarrow's new coal staiths will be ready in the spring, and there may perchance be other developments to restore an air of prosperity to our river. The Commissioners are keenly alert to all that is going on, and anxious to render whatever assistance they can to foster and encourage local industry."

Col. Sir Frank R. Simpson was elected deputy-chairman.

Shortly after the meeting of the Tyne Improvement Commission referred to above, it was announced that the Minister of Transport, under the powers vested in him by the Tyne Improvement Act, 1934, had appointed Mr. H. P. Everett to fill the vacancy caused by the death of Lord Kirkley as a Life Commissioner.

Sharp Work on the Wear.

Two instances of smart work are reported from the Wear. The steamer "Birtley," which arrived one morning in November in the docks at 9.34 a.m., began loading 4,394 tons of coal and bunkers at 10.15 a.m., and completed loading at 6.45 p.m. to leave for London at 8.20 p.m. This was an average

of 494 tons loaded per working hour. The other was a smart loading achievement in regard to the steamer "Gogovale" (2,918 net register), which took on 6,138 tons of Wearmouth coal as cargo in 39 hours, and 1,030 tons of bunkers in 20 hours, a total of 7,738 tons in 59 hours. This was considered to be a fine piece of work as the vessel is an awkward three-decker trimming type.

Coal and coke shipments from Sunderland during October amounted to 301,780 tons, compared with 342,204 tons in October last year. For the ten months ended October 31st shipments amounted to 3,139,303 tons, compared with 3,318,481 tons in the first ten months of 1934. Other exports during the ten months totalled 33,352 tons, against 39,239 tons in the same period last year. Imports during October amounted to 26,444 tons, an increase of 6,000 tons on October last year, when the total was 20,807 tons. For the ten months ended October 31st the imports totalled 288,674 tons, against 290,595 tons in the same period last year. The imports included 111,748 loads of timber and props, 6,075 tons of grain, 19,706 tons of esparto grass, 36,051 tons of iron ore, 15,237 tons of cement, 70,522 tons of petroleum, 5,042 tons of wood pulp, 606 tons of iron and steel, and 23,627 tons of sundries.

Something like a Record.

Sir Arthur Sutherland, as President of the Newcastle and Gateshead Chamber of Commerce, had the pleasure, according to an old custom, of welcoming North Country civic heads at a meeting of the body in December. He said the trade of Tyneside was certainly improving, and he thought they might all look forward to greater activity in 1936. In the course of an interesting speech, Sir Arthur said, "In the past two years I have ordered a good many ships for companies over which I preside, and this morning I have pleasure in telling you I have just ordered two more for the Tyne Tees Company, one to be built at Hebburn, and the other at Middlesbrough. In less than two years I have ordered 17 ships—nine for the Tyne Tees Shipping Company, and eight for my company, the B. J. Sutherland Co., Ltd., the cost of these vessels in the aggregate being about one million sterling. Shipbuilding on this river will open in the New Year with very much more work in hand than it had twelve months ago, and I am pleased to think that an old and respected firm at the harbour end, Messrs. J. Readhead and Sons, have re-opened after quite a spell of idleness."

On the Way to New Record.

At the November meeting of the Blyth Harbour Commission Mr. Ridley Warham, chairman, submitted particulars of the coal shipments for the ten months ended October 31st, which were as follows:—1935—5,250,811 tons; 1934—5,264,629 tons; 1929—4,645,465 tons. The totals showed a decrease of 0.26 per cent. on 1934, and an increase of 13 per cent. on 1929. The Chairman drew attention to the fact that the shipments up to October 31st were about 14,000 tons less than in 1934, but since that date the shortage had been made up, and up to the end of the second week in November the shipments for the year were 6,778 tons in excess of 1934, and, unless something unforeseen occurred, there was every prospect that the record shipments of that year would be exceeded.

Port of London Notes

London's Shipping.

During the week ended 29th November, 974 vessels, representing 905,361 net register tons, used the Port of London. Of these, 470 vessels (693,950 net register tons) were to and from Empire and Foreign Ports, and 504 vessels (208,411 net register tons) were engaged in coastwise traffic.

During the week ended 6th December, 1,267 vessels, representing 319,557 net register tons, used the Port of London. Of these, 450 vessels (660,539 net register tons) were to and from Empire and Foreign Ports, and 817 vessels (259,018 net register tons) were engaged in coastwise traffic.

During the week ended 13th December, 1,045 vessels, representing 1,088,769 net register tons, used the Port of London. Of these, 512 vessels (863,134 net register tons) were to and from Empire and Foreign Ports, and 533 vessels (225,635 net register tons) were engaged in coastwise traffic.

During the week ended 20th December, 1,097 vessels, representing 1,103,165 net register tons, used the Port of London. Of these, 560 vessels (883,532 net register tons) were to and from Empire and Foreign Ports, and 537 vessels (219,633 net register tons) were engaged in coastwise traffic.

Tilbury Passenger Landing Stage.

Thirty-nine vessels, totalling 382,884 gross register tons, used the Passenger Landing Stage during the month of November.

Hull and the East Coast

Revival of Humber Bridge Project.

THE revival of the project to build a road-bridge over the River Humber to connect Hull with growing industrial areas in North Lincolnshire came before the Humber Conservancy Commissioners at their November meeting, when a letter was received from the Town Clerk enclosing a copy of the report placed before the Parliamentary Committee of the Hull Corporation, the object being to open the way so that the matter should be brought formally to the notice of the Conservancy and other bodies. It was pointed out in the letter that there was no reference in the report to the financial proposals as it was impossible to deal with them until every Council had discussed the project. Mr. J. H. Fisher, J.P. (chairman) said that the report dealt with the scheme and plans prepared by Mr. Ralph Freeman, Consulting Engineer, showing the proposed suspension bridge between Hessle, west of Hull, and a point about a quarter of a mile west of Barton Haven, with a single span of 4,500 feet from low water to low water and a headway of 105 feet. It was stated that the time required for the construction of the bridge would be approximately three years. The Conservancy Board on the recommendation of the Works Committee have decided to ask the Town Clerk to be furnished with an advance copy of any particulars or detailed plans which may be available, and on receipt of the same that the Board's engineer should report on the proposals. Councillor A. Cargill, who led the opposition in the City Council to the previous scheme, stated that if circumstances demanded it he would require to be briefed accurately, as to Board's intentions in connection with the new project. The financial provisions, he added, would be very different in this instance. As the Conservancy Board, who, up to now, had been against the scheme, would be one of the principal parties, he thought that they ought to be properly informed before the City Council met. Mr. W. Minnitt Good supported the suggestion and moved that a special meeting of the Conservancy Commissioners be called as soon as practicable after they had been supplied with the details of the new project by the Hull Corporation. Mr. Cargill seconded, and the motion was carried. In reply to a question by Sir Hickman Bacon, Bart., the Clerk stated that it would not be possible for the Hull Corporation to promote a Bill in the ensuing session of Parliament. Mr. Cargill said that he intended to approach the matter with an open mind. He might have a different opinion this time, but he would certainly be guided by the Board's experts and the responsible members of the Commissioners rather than by irresponsible people who had backed the scheme from time to time and who might not be right in their premises. The Chairman commented that the only plans presented to the Board were antiquated plans showing the different piers in the river, and this had been washed out. The third plan received showed a span from low water to low water, but there was not a single detail, so far as measurements were concerned. The Commissioners would require to know the measurements of the buttresses and other details.

More Dock Accommodation required at Hull.

The question of increased dock accommodation at Hull to meet the requirements of the general shipping trade of the port is again receiving attention from commercial interests, and efforts are to be made to induce the London and North-Eastern Railway Company, the owners of the docks at Hull, to take the matter into their immediate consideration. The import timber trade is more particularly concerned. The Hull Shipping Committee have continued to work closely with the timber trade and the local port authority in an attempt to minimise delays occurring to steamers during the height of the season, but while admitting that the average delay to vessels has been considerably less than in the 1934 season, they point out in their report that serious delays have been occasioned to particular vessels. At the same time, it has to be borne in mind that this season's imports of wood at Hull have been considerably less owing to market conditions. Nevertheless, the accommodation is inadequate, and that such a state of affairs is permitted to exist year after year has been the subject of strong protest. It is felt that the only really satisfactory solution is the provision of additional facilities and accommodation. It is admitted that considerable capital expenditure will be necessary, but in the view of the Shipping Committee modern requirements must be satisfied if the port is to maintain its position. The Chairman of the Committee (Mr. W. Minnitt Good), at the annual meeting of the Hull Chamber of Commerce, enlarged upon this, and said that at Victoria Dock the want of accommodation gave great trouble to shipowners—days of waiting for a berth and, when the berth was obtained, restrictions on the number of bogies supplied and so on. The timber trade and the Shipping Committee had had several

joint meetings, and also jointly had met the Railway Company, and apparently the latter blamed the merchants, whereas the merchants blamed the Railway Company and, he thought, rightly so. "How can it be expected," asked Mr. Good, "that a dock which was built to accommodate, and did accommodate, the timber trade forty years ago, with the assistance of the Queen's Dock, will do the same to-day without it?" This, he added, was a most crying need. It was essential that further accommodation should be provided at once; the space was there in Earle's Shipbuilding Yard (now closed) and the Western Reservation. Mr. Good also commented on the fact that there had been no additions for other trades since the opening of King George Dock in 1913, and the closing of the old Queen's Dock in more recent years. It might, of course, be that the L.N.E.R. Board of Directors, being more particularly railway men, did not understand the needs of the port, and possibly this was the kindest interpretation to put upon their present attitude. It must be recognised that the Port of Hull was entirely a separate entity, and that while it acted as a feeder for the railway must be treated separately. In the "old days," he said, the Hull Dock Company were never prepared to do anything until faced with opposition. Thus, their do-nothing attitude brought about the building of the Alexandra Dock, and no further steps were taken to improve Hull until the Great Central Railway Company were building Immingham Dock, and only then were steps taken to bring the King George Dock into existence. Mr. Good hoped that the L.N.E.R. directors would realise that, whatever they might do for the fish dock and hotel accommodation, the Port of Hull itself could not continue as it was, and he suggested that as the L.N.E.R. were apparently likely to obtain a large loan from the Government for the improvement of their properties, it would be well if the directors earmarked a portion for the extension of the dock facilities of the port.

Major W. H. Carver, M.P., a director of the London and North-Eastern Railway, promised that his co-directors would consider what Mr. Good had urged. They were aware that there had been delay in the timber traffic at the Victoria Dock, but he could assure his hearers that the officials of the Company were doing all they could to alleviate it. Major Carver added that he did not know whether the time had come for the extension of King George Dock, but prospects were better. He went on to say that a large sum of money was to be spent at St. Andrew's Dock and on an extension of the water area to the West to find more room for the fishing fleets. They could not resist a progressive industry like that which through all these years of difficulty had gone from strength to strength. The continued increase of the quantity of fish landed at St. Andrew's Dock merited an extension of dock space and three-quarters of a million pounds was to be spent there. He also mentioned the provision of a new goods shunting yard, electrically worked, and the completion of the new Royal Station Hotel, and said that other things were being carefully considered. The railway and dock officials had the interests of the port at heart, and new schemes were constantly being brought forward for the benefit of the port, but they must remember that there were such things as shareholders and difficulties of finance.

New Landing Stage at Hull.

The work connected with the construction of a new landing stage and floating pontoon at Hull for the better convenience of the ferry traffic across the Humber is being pushed forward. Meanwhile, temporary accommodation has been provided at Southend pier adjoining. At the St. Andrew's Dock the existing dock gates of timber, which have been in use over 50 years, are to be replaced by others of modern design, and the work is to be taken in hand immediately.

Bridlington Harbour.

The dredging of Bridlington (East Yorkshire) Harbour has been resumed after the summer vacation, during which the dredger "Rosevis" underwent overhaul and repair. The state of the harbour is much improved as the result of the removal of over 70,000 tons of material, but much more requires to be done to enable shipping to enjoy the full benefit of the water-space and quays.

Manchester Ship Canal Traffic.

Manchester Ship Canal Company reports that traffic receipts in November were £90,568, compared with £90,580 in October and £95,303 in November, 1934. For the first eleven months of 1935 the receipts totalled £1,092,558, or £21,523 more than in the corresponding period of 1934. For the first half of 1935 the traffic receipts were £12,519 larger than those of the first half of 1934.

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Subaqueous Rock Removal in San Francisco Harbour

By Colonel HENRY A. FINCH, Corps of Engineers, U.S. Army

(continued from page 54)

THE DRILL BOAT, a wooden hull 34 ft. by 110 ft., carried two steel derricks, each standing 67 ft. above water level. These were moved on a track of steel H-beams paralleling one side of the hull and were shifted by an endless chain actuated by a hydraulic cylinder (Photos 8, 9, 10 and 11). In each derrick was mounted an X-80 submarine, air-

Two oil-fired boilers furnished steam to the spud hoists, and two air compressors, the mooring winches, a generator and the various pumps (Photo 17).

A storage room for explosives, water and fuel-oil tanks and two office rooms for the contractor's superintendent and the Government inspector, completed the equipment of the drill boat.

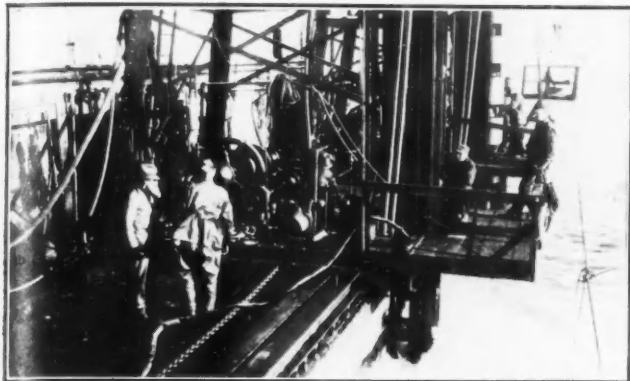


Photo No. 8. View of Drill Derricks, Working Platforms and Track.



Photo No. 10. View from Office Entrance Platform, showing Base of each Drill Derrick.

driven hammer drill (Photos 12 and 13). This was supported in a steel framework suspended from the base of the tower, and moved in steel guides that could be lowered to rest on the rock. The lower portions of the drill columns ended in 7-ft. sand-pipes, the upper ends of which were flared to facilitate inserting the steels and loading the holes. The steels were rotated in geared chucks by air motors mounted on top of the drill ladders and driven through a series of tube sections carried in bearings fastened to the ladders. A water jet, under 200 lbs. pressure, for clearing the holes was carried through the length of the drill steels. These steels were sharpened and shanked on board in a completely equipped shop (Photo 14). To provide the stable platform that was essential for successful drilling, it was necessary that the barge be equipped to support itself rigidly against wind, waves and tidal currents. This was secured by the use of four structural steel spuds, about 60 ft. long, made up of three 24-in. I-beams, and each actuated by an independent hoisting engine (Photos 15 and 16). On these supports the drill boat could lift itself above its flotation level. Normally the elevation needed was only about

The dredger was mounted on a 32 ft. by 107 ft. wooden barge. The machinery consisted of a hoist with an 11 by 12 engine on a Wiley Whirley derrick with a 55 ft. boom (Photo 18). A special square-nosed 2½-yd. clamshell bucket weighing 7 tons (Photos 19 and 20) was provided for digging the broken stone. A heavy drag, 40 ft. long, was suspended under the hull for use in clearing the areas after dredging.

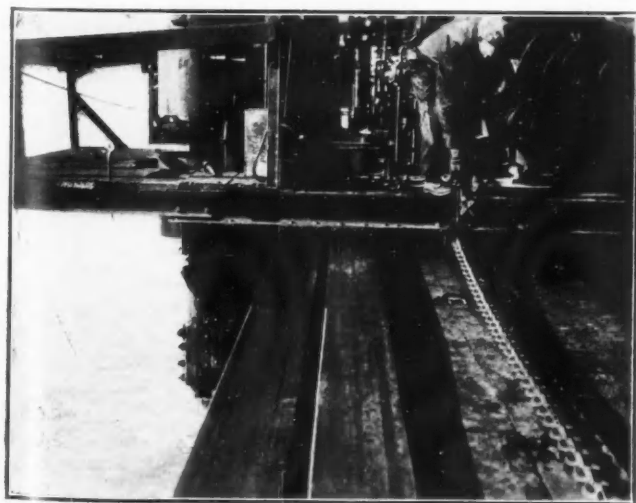


Photo No. 9. Showing Base of Drill Derrick, Track on which it moved and Endless Chain for shifting it.

6 inches, but during periods of heavier swells this was increased to as much as 18 inches. There were times when even this elevation was not enough; then no drilling was attempted. The drill boat was also controlled by six anchor lines, one each ahead, astern and over each quarter. Each line was served by a separate winch.



Photo No. 11. Top of Drill Derrick.

This consisted of two 24-in. I-beams side by side with an oak timber filler between them. A toothed plate extended forward from the bottom of the beam. Two steel cables running over opposite points on the sides of the hull and controlled by independent hoisting engines, supported the drag, which was hauled by two lines extending from the ends of the beam over

Subaqueous Rock Removal in San Francisco Harbour—continued

the bow of the barge to deck winches. Four breast lines and one stern line held the dredge in place. This unit was also equipped with a set of leads for handling a drill for taking off high spots disclosed by the dredging, but it was not used.

the lining in to be accomplished by other means. Two steel tripods with telescopic legs were placed on the rock, these being held steady by cables in three directions. The positions of these tripods, determined by sextant angles from shore



Photo No. 12. View of Submarine Hammer Drill. Two were carried on Drill Boat.

A separate boiler supplied steam for the different pumps and winches and for the lighting plant.

The derrick barge, on a wooden hull 32 ft. by 95 ft., carried an "American" hoist with a 9 by 10 engine mounted on a Wiley Whirley derrick with a 75 ft. boom. This was used

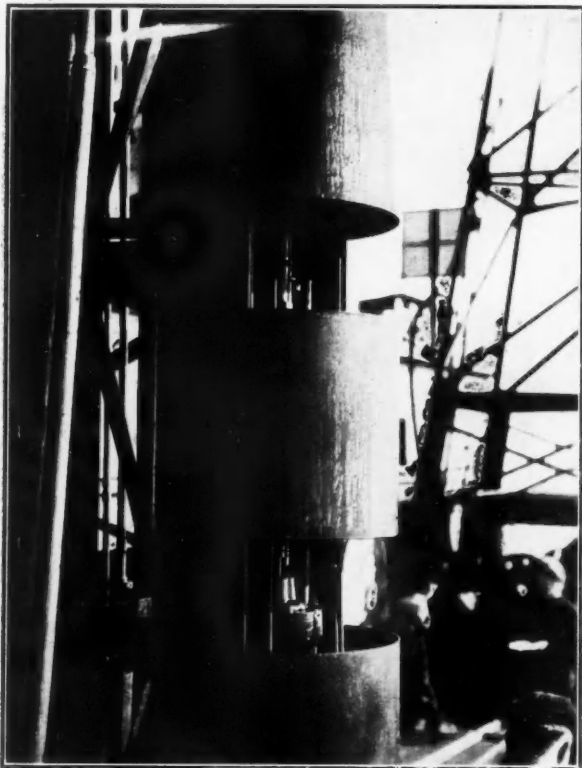


Photo No. 13. Sheet Metal Quartz for the drill column. These made it easier to handle the drills in strong tidal currents.

principally for handling mooring anchors and for "lining in" the drill towers. A clamshell $1\frac{1}{2}$ yd. bucket completed this unit.

As the work was too far from shore to enable the drill boat to be spotted directly from shore ranges, it was necessary for

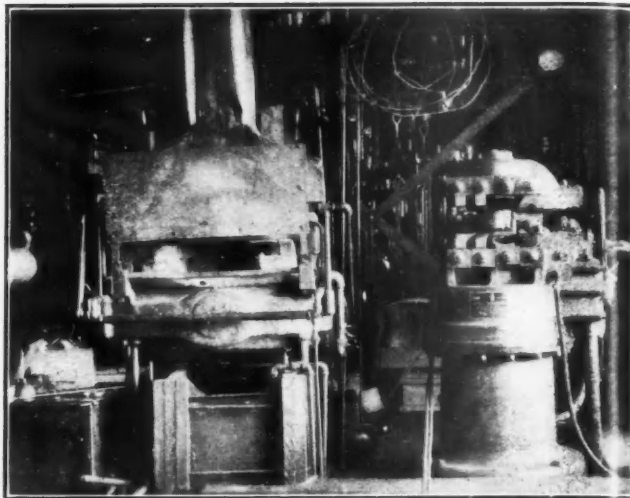


Photo No. 14. Oil-burning Furnace for heating drill-steels and pneumatic sharpener, on drill boat.

stations, were plotted graphically on charts covering the different rocks, on a scale of 1 in. to 20 ft. Stretched between the tripods was a wire carrying measuring tags every 10 feet. The drill boat was spotted by sighting through slotted sights (on the boat) at the distant tags on the wire and by measuring the distance from the boat to the wire. When the work was well under way it required from 10 to 30 minutes to spot the boat and raise it on its spuds.

Holes were drilled in line on 9 to 12 ft. centres, depending on the hardness of the rock, and to depths of 5 ft. to 8 ft. below the plane of allowable over-depth dredging. Four inches in diameter, the holes were sunk at rates ranging from one foot per minute to one foot every three minutes. When a hole was completed, a charge of about 24 lbs. of 60 per cent. "Hercules" gelatine (12 sticks, 2 ins. in diameter and 8 ins. long) was inserted by the following method: The explosive was placed in the lower end of a brass pipe containing a smaller pipe used as a plunger, the handle of the latter extending out of the upper end of the loading pipe. The electric detonator was placed in the second cartridge from the bottom and the lead wires (rubber-covered cables) were carried out through a slot in the side of the loading pipe. The pipe was then lowered to the bottom of the hole, the charge being kept in place by holding taut the lead-wire cable. The loading pipe was then withdrawn. As this was done the charge was cleared from the cylinder and pushed into the hole by the plunger. The derrick was then moved to a new position and another hole drilled. After 8 or 10 holes had been prepared (all that could be drilled from one setting of the boat) the latter was towed from its spuds and by its anchor lines was pulled off about

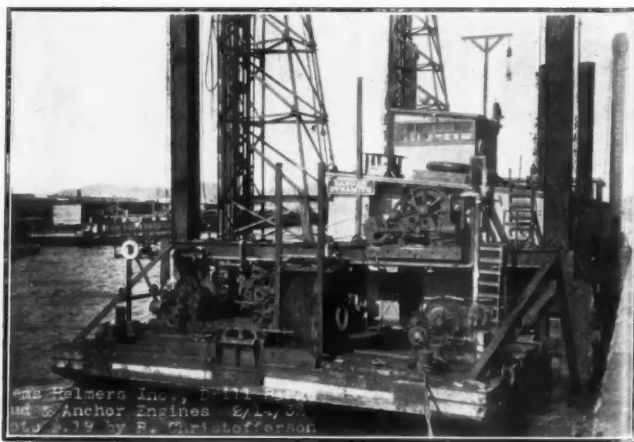


Photo No. 15. View of Drill Boat, showing Spud and Anchor Engines.

150 ft. when the charges were fired. The boat was then shifted to its next position, raised on its spuds and the operation repeated.

As compared with the spectacular effects accompanying the surface blasting of earlier years, the contractor's work in this

Subaqueous Rock Removal in San Francisco Harbour—continued

case attracted little attention from the public. With the seagulls, however, those intelligent scavengers, it was different. After the first explosion had brought a variety of stunned fish to the surface, they never failed to report for rations after each dull boom announced another serving for them!

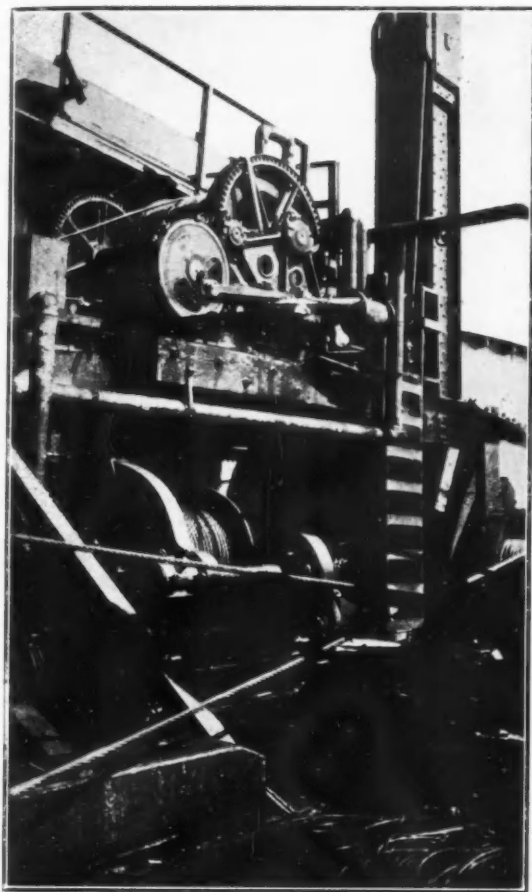


Photo No. 16. View of Structural Steel Spud on Drill Boat, with Independent Hoisting Engine.

Drilling began on December 10th, 1931, and was completed on May 28th, 1932. A total of 2,646 holes was drilled in six pinnacles. The seventh, Harding Rock, was surface-blasted, being too small and with sides too steep to afford a stable station for the drill boat. The average depth of holes was 11.8 ft. and the total drilling time was 888 hours.

The dredged material (Photos 21 and 22) was placed in dump-barges and deposited in deep-water areas adjoining the site of the work, with a stipulation that a minimum depth of at least 60 ft. be maintained over the dumping ground.

Dragging followed the dredging. The drag, carried by the dredger, was placed in position two feet below the plane of

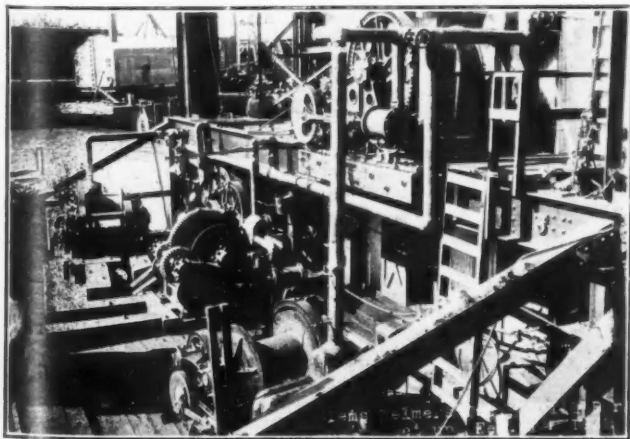


Photo No. 17. Engine Set-up on Drill Boat.

required depth, and this was adjusted every 15 minutes with the height of the tide. As the dredger moved over the area, the drag was sufficiently heavy to push loose material ahead of it into deeper water. A few high spots that the drag could not clear were surface-blasted and re-dredged. Later, before

acceptance by the Government engineers, some 15,000 soundings were taken over the seven areas and plotted. These disclosed a few high spots which were removed by the derrick barge as the soundings progressed. Later, sweeping operations revealed the presence of two seven-ton anchors lost by the contractor which had to be removed.

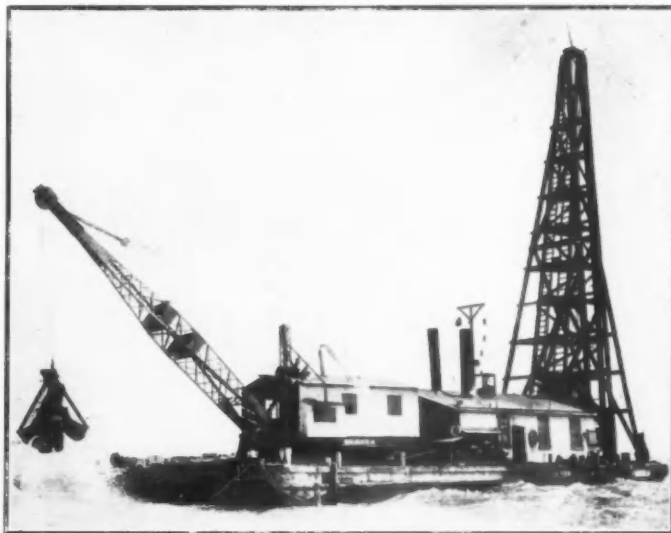


Photo No. 18. Dredger equipped with Wiley Whirley Derrick with 55-ft. boom; also Drill Derrick which was not used.

The work was accepted and final payment made on the contract in August, 1932.

The total quantity of material removed as determined by soundings was 72,846 cu. yds. Of this 46,645 cu. yds. were within the prisms paid for. Thus the contractor received payment for more than 68 per cent. of the 47,133 cu. yds., the

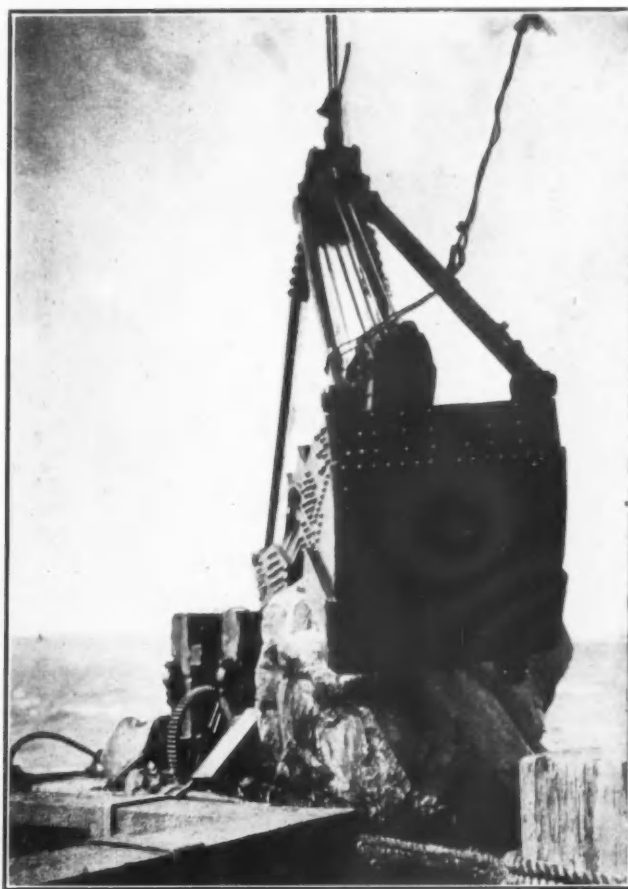


Photo No. 19. Rock weighing 11 1/2 tons handled by 2 1/2 yard, 7-ton bucket.

possible total for which he might have been paid. It is understood that the firm made a handsome profit on the contract. This was well deserved for the entire work was carried out most efficiently, with a minimum of accidents and as speedily as conditions permitted.

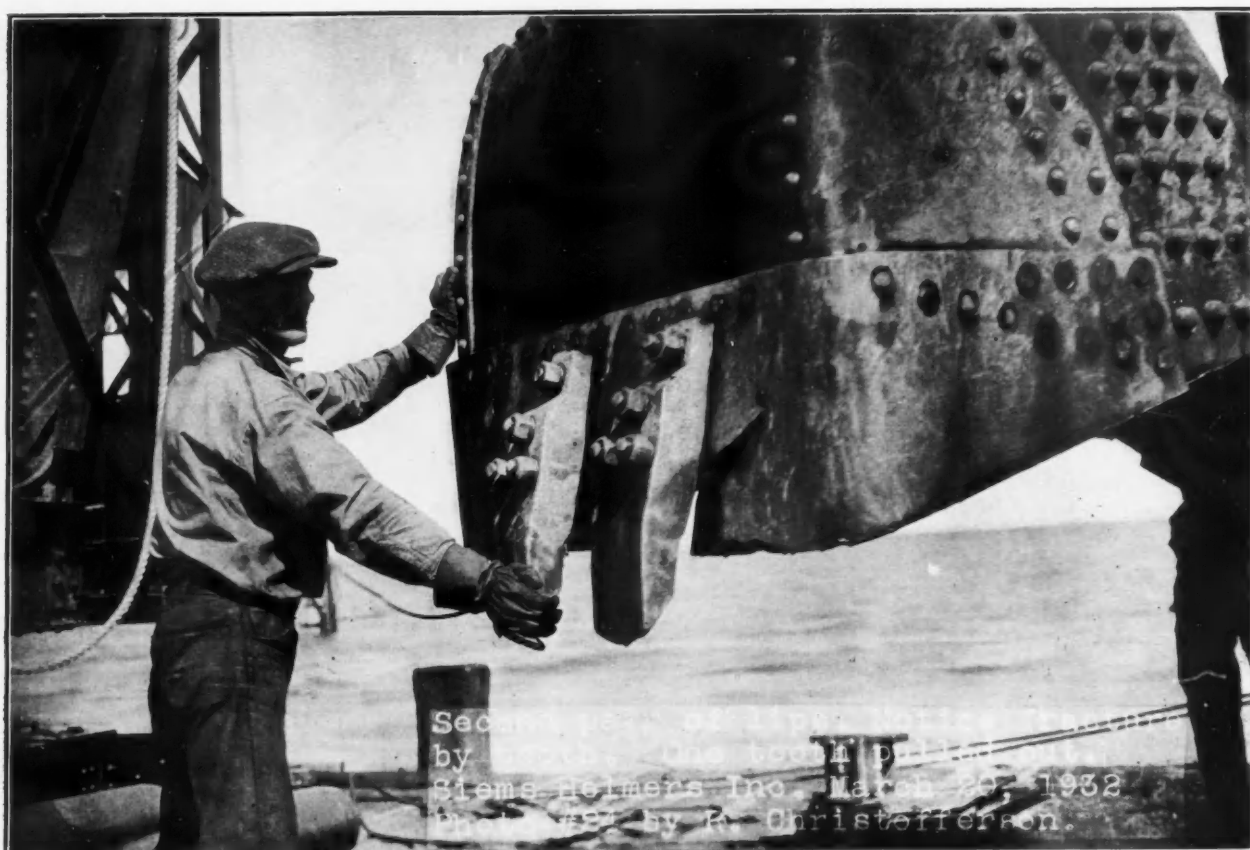
Subaqueous Rock Removal in San Francisco Harbour—continued

Photo No. 20. This Bucket took rough treatment and was wearing its second pair of lips. Casualties: One tooth pulled out and lip torn.

For Siems-Helmets, Inc., Messrs. J. M. Kellogg was engineer and C. E. Ryan was superintendent. Mr. R. W. Christofferson was in charge of the Company's San Francisco office. Mr. H. S. Pond, Senior Engineer, had general supervision for the United States, with Associate Engineer R. E. Demeritt in direct charge of inspections and surveys.

(San Francisco) and "Compressed Air Magazine" (New York) for certain material appearing in articles on this project



Photo No. 21. Type of material dredged, shattered Sandstone with occasional large fragments.

Grateful acknowledgment is hereby extended to Mr. Christofferson for the use of some of the photographs illustrating this article, and to "Western Construction News"



Photo No. 22. A Sample Fragment. Seven-ton Bucket.

written respectively by Mr. H. S. Pond and Mr. Lawrence A. Luther.

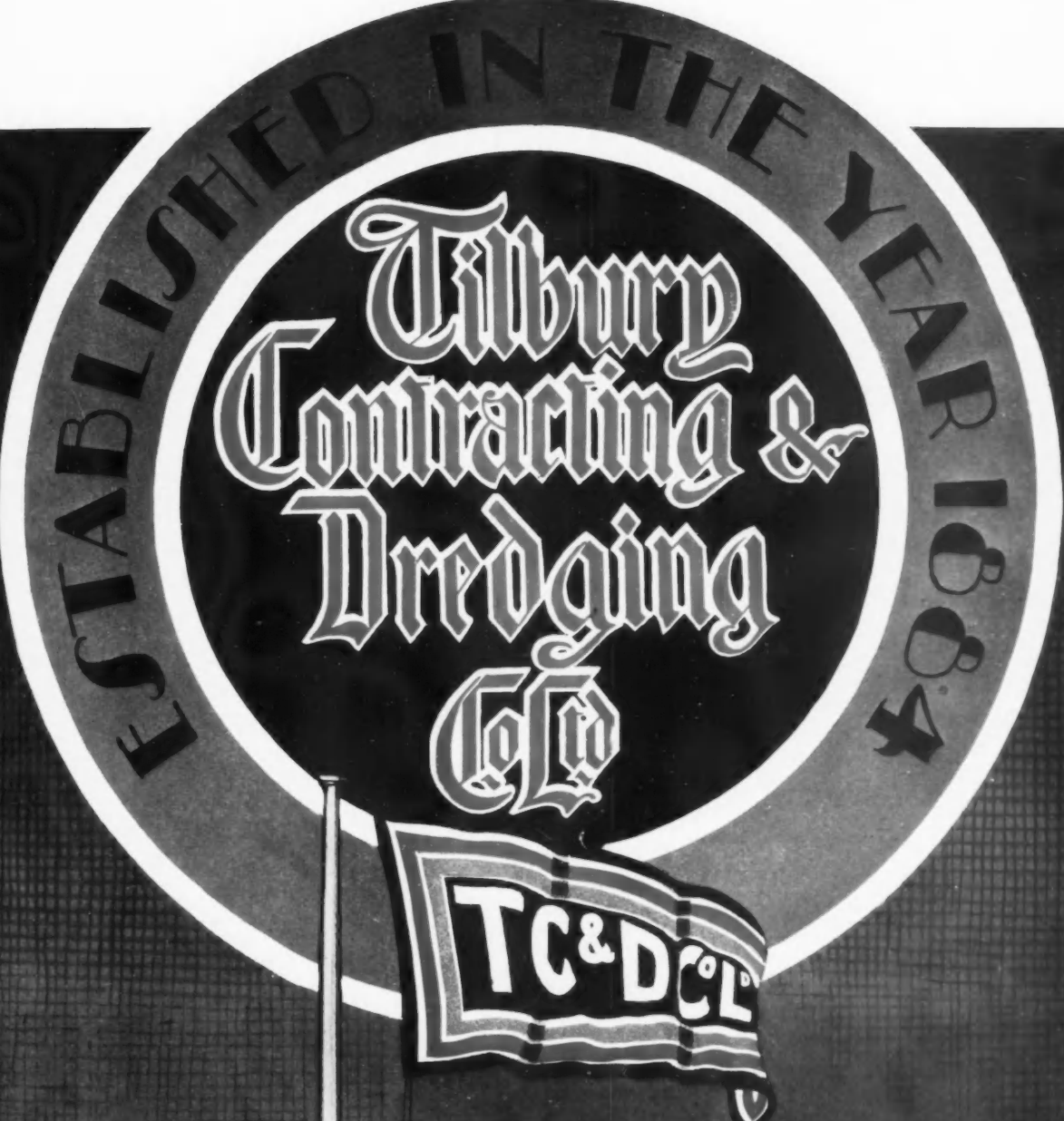

The Port of Rotterdam

The Chamber of Commerce and Industry of Rotterdam has recently issued the statistics concerning the movement of sea-going ships in the new Waterway, and which are as follows: During November, 1935, 997 ships with a net registered tonnage of 1,618,402 entered the Port of Rotterdam, as compared with 985 ships of 1,485,445 n.r.t. during November, 1934. The number of ships entering for the small ports in the environs were 198 of 418,828 n.r.t., as compared with 192 ships of 347,563 n.r.t. in November, 1934.

For the eleven months ending November, 1935, 10,102 ships of 16,359,240 n.r.t. entered the Port of Rotterdam, as compared with 10,480 ships of 16,505,912 n.r.t. for the correspond-

ing period of 1934. The number of ships entering the Port of Rotterdam for the small ports in the environs during the first eleven months of 1935 amounted to 2,168 ships of 4,345,918 n.r.t., as compared with 2,316 ships of 4,151,795 n.r.t. for the corresponding period of 1934.

After deducting the number of ships counted more than once in the different ports, the number of entrances during the month of November, 1935, amounted to 1,138 ships of 1,868,917 n.r.t., as compared with 1,127 ships of 1,671,022 n.r.t. in November, 1934. For the first eleven months of 1935 the total entrances were 11,644 ships of 19,018,552 n.r.t., as compared with 12,194 ships of 19,278,085 n.r.t. for the corresponding period of 1934. These figures are for the whole region of the Port of Rotterdam with its environs, comprising the delta formed by the mouths of the Rivers Rhine and Meuse.

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WHEN REPLYING PLEASE MENTION "THE DOCK AND HARBOUR AUTHORITY."



A "Babcock" 80-ton Electric Overhead Travelling Crane, fitted with Dynamic Braking, 4-motor type. Auxiliary Hoist, 10 tons. Span 62 feet. Installed at Deptford East Power Station, London, by The London Power Company Ltd.

BABCOCK CRANES



PORT OF LONDON AUTHORITY
Royal Albert North Dock and Basin,
King George V. and Tilbury Docks.
Eighty-two "Babcock" 3-ton
Electric Portal Jib Cranes fitted with
Patent Balanced Lever-Luffing Gear.



A "Babcock" 80-ton Electric Giant Crane installed by J. Samuel White & Co., Ltd., at East Cowes, Isle of Wight. Extreme radius, Main Trolley 72 ft. 6 ins. Extreme Radius Auxiliary Trolley 102 ft. 6 ins.

Babcock cranes are designed to give the utmost precision of handling for such service as seating aircraft, erecting machinery or foundry duty. For this latter service a special design has been evolved having enclosed gears running in oil baths and mounted on ball or roller bearings, a development which has reduced wear to a minimum and made a substantial saving in power consumption. This design is also eminently suited for work in the open or in a corrosive atmosphere and has given first class service in numerous installations over the last six years.

The well-known Babcock Level Luffing Crane continues to find fresh billets from the Baltic to the Pacific, but repeat orders continue to be a prominent feature of our business.



Installed at DEPTFORD EAST POWER STATION, LONDON, by The LONDON POWER CO. LTD. Two "Babcock" 4-ton Electric Travelling Jib Cranes, fitted with Patent Lever-Luffing Gear and Jib. Maximum radius 55 feet. Grabs of 2-rope type for handling small coal. Also 3-7 ton portal cranes installed.



VIGO HARBOUR BOARD, VIGO, SPAIN. "Babcock" Electric Floating Jib Crane to lift 60 tons at 15 Metres radius and 35 tons at 20 Metres radius. Fitted with Auxiliary Hoist to lift 10 tons at 23 Metres radius. Steam engine fitted for propelling pontoon and driving dynamo supplying electric current for crane.

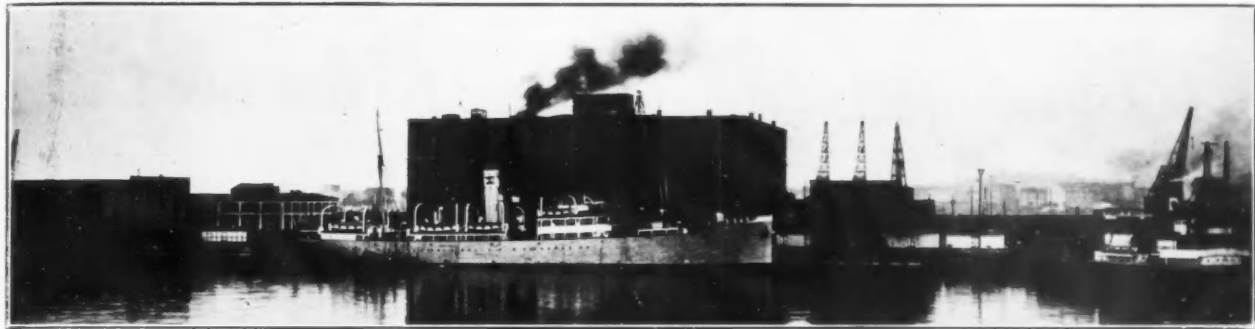
BABCOCK & WILCOX LTD.

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Refold

KOUKOKUSHA NI OTEGAMI ONSASHIDASHI NO SAIWA DOZO "DOCK AND HARBOUR AUTHORITY" NITE GORAN NO MUNE ONKAKISOE NEGAIMASU.

The Port of Gdynia, Poland



A Polish-British Steamer loading Eggs, Bacon and Butter from the Port Refrigerator.

Introduction

ON obtaining its political and economic independence at the close of the Great War, the Polish State, true to its former traditions, embarked immediately upon a policy of co-operation with the other Powers for the creation and perpetuation of normal political and commercial relations.

Thanks to its geographical position at the crossing of ancient trade-routes, from North to South connecting the Baltic with the Black Sea, and from West to the Near and Far East, Poland, with its population of 32 millions, its natural resources and its well-developed industry, became one of the principal guarantees of political and economic equilibrium on the Continent of Europe.

The territories of post-War Poland found what had been their natural and nearest markets greatly diminished or entirely cut off. Poland was driven to direct her energies on to the free and international path of maritime trade and to foster accordingly her merchant fleet.

In consequence of such economic dictates we may observe the gradual but persistent development of Polish overseas trade. The sea became for Poland the natural route for export of her excess produce, the sole avenue of completely unfettered international exchange. It is, therefore, no source of surprise that Poland's maritime trade, amounting in 1922 to barely 7.3 per cent. of her total trade, attained by 1934 the proportion of 69.9 per cent.

The following table will illustrate the swift development of Poland's overseas trade and its proportion to her foreign trade in general:—

Year	Percentage of Maritime Trade in the General Foreign Trade of Poland Per Cent.
1922	7.3
1923	7.4
1924	13.1
1925	16.3
1926	27.1
1927	35.0
1928	38.0
1929	42.0
1930	51.3
1931	63.2
1932	67.8
1933	69.4
1934	69.9

It must be mentioned at the same time that this is but the first step in the transference of Poland's foreign trade to maritime routes, since the great majority of her exports have been directed as yet exclusively to European markets.

In this connection the trend of development of the last five years is as follows:—

Year	To European Markets Per Cent.	Polish Export To non-European Markets Per Cent.
1929	95.5	4.5
1930	94.9	5.1
1931	94.1	5.9
1932	94.0	6.0
1933	92.2	7.8
1934	91.1	8.9

It is evident from this that Polish maritime trade has every prospect of considerable further expansion.

Development of Polish Ports.

Simultaneous with the development of Poland's maritime trade and inseparable from it has been the rapid development and expansion of the ports lying within her tariff boundaries: Danzig and Gdynia.

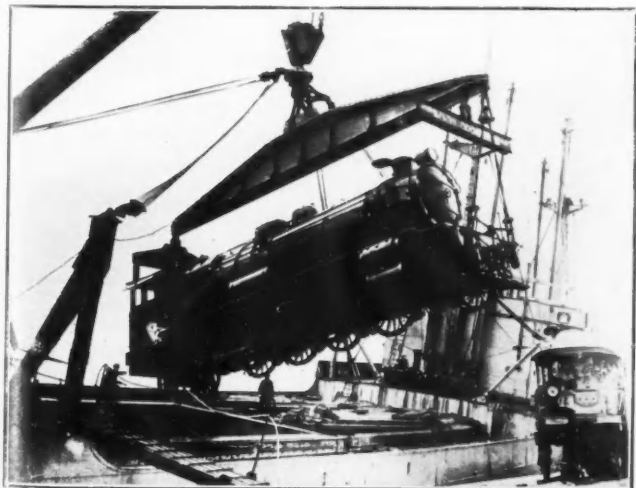
The Port of Danzig, incorporated into the customs area of Poland, is rapidly becoming one of the greatest commercial ports of the Baltic, from being a comparatively small port of largely local significance and with fairly primitive equipment.

Danzig is recovering that importance which it possessed from the 15th to the 18th Century, its period of greatest development, when it belonged to Poland and concentrated in itself the whole of her overseas trade.

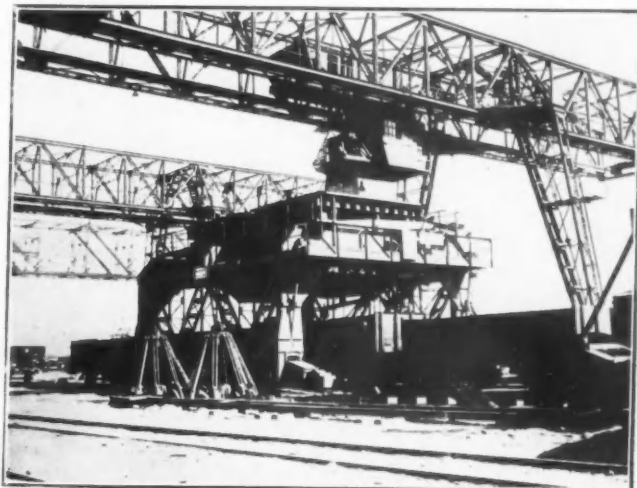
In the post-War period the harbour of Danzig is being modernised, its equipment developed, together with its turnover, based once more on permanent economic relations with the State of Poland.

The possibilities of the exploitation of Danzig as a port are not sufficient, however, to serve as a permanent basis for the development of Poland's sea-trade. Independently, therefore, of the expansion and modernisation of Danzig Harbour, it was decided in 1924 to erect a second seaport at Gdynia.

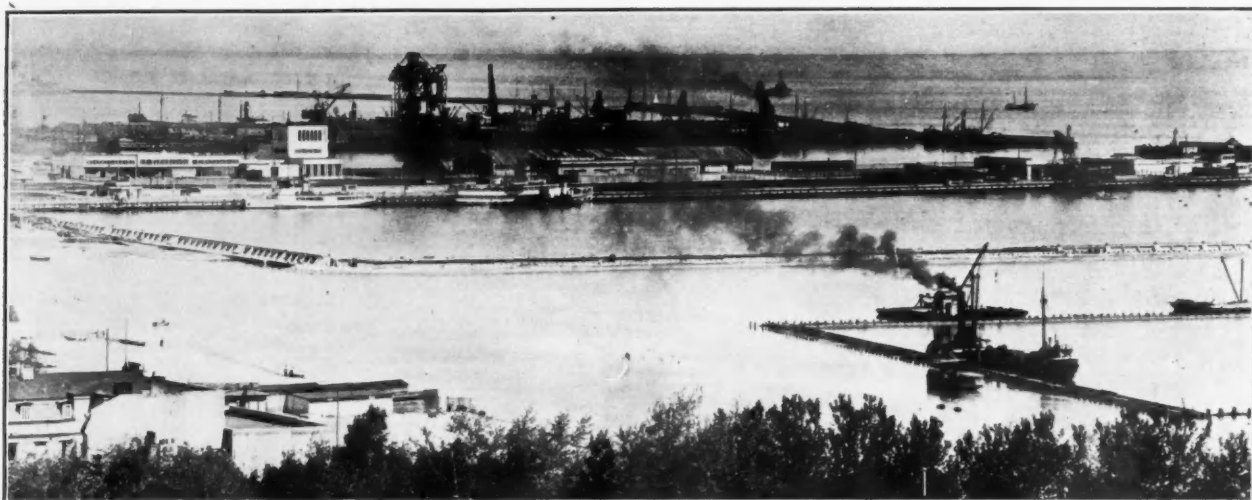
The rapid construction of Gdynia and the almost simultaneous development of its commercial turnover, the concentration of a series of international trade-routes on this port, all testify indisputably to the economic need of a second large Polish port on the Baltic, such as Gdynia is at present becoming.



Loading Railway Engines for French Colonial Railways, Morocco.



A 200-ton Automatic Scale for Coal and Ore.

Port of Gdynia—continued*General View of the Outer Harbour, showing a New Wharf under Construction.**Description of the Harbour and Harbour Equipment**General Information.*

The harbour of Gdynia is State property, administered by the Harbour Board in Gdynia, which is dependent on the Ministry of Industry and Commerce.

The construction of the harbour, in accordance with plans drawn up by the Ministry of Industry and Commerce, is being executed by the "Franco-Polish Consortium," which includes the firms: Société de Construction des Batignolles, Schneider & Cie and Hersent, Ltd., of Paris; Ackermans & Van Haaren, of Antwerp; Hojgaard & Schultz, of Copenhagen; and also the Polish group, Building Society F. Skapski & Co. Engineers, Ltd., and Engineer W. Paszkowski, who have been members of the Consortium since the year 1932.

The work on the harbour, executed on the basis of agreements of the years 1924, 1926, 1928, 1930, and 1932, and kept within the bounds of such needs of further expansion as were indicated, has included the building of an outer basin and outer harbour into the sea and the excavation of basins to form the inner harbour. The wharves have been constructed in the most modern fashion.

At the end of 1935 the work had reached the following stage:—

Length of breakwaters built, 4,255 metres (13,917 ft.); length of wharves already in use, 12,218 metres (39,963 ft.), with a depth of 6-12 metres (19½ to 39 ft.); total harbour area as yet 950 hectares (2,075 acres); area of water 350 hectares (864 acres).

The harbour possesses up-to-date plant for transhipment of miscellaneous goods and bulk cargo. The number of cranes is constantly on the increase and at present amounts to 58, with a total tonnage of 231.5.

The area of the harbour warehouses in use amounts to about 190,000 square metres.

The length of railway track in the harbour is 168 kilometres (104 miles).

There are also industries and special plant in the port: a port refrigerating plant, a rice mill, an oil mill, a grain silo, a sorting and packing warehouse for dried fruit, plant for the fish industry and trade, a shipyard with a repair workshop and

a floating dock with a lifting capacity of 3,500 tons, and coal and oil bunkering stations.

*Geographical Situation of the Port**Conditions of Navigation.*

The Port of Gdynia is situated on the south-west coast of the Bay of Danzig on the Baltic Sea at latitude 54°32'N. and longitude 18°31'E. of Greenwich.

The geographical situation of Gdynia gives an easy approach to the harbour and ships can lay in the roads with perfect safety even during stormy weather. The far-sweeping peninsula of Hel provides a natural shelter for the Bay from the waves of the open sea and the north-east winds and waves.

From the southernmost extremity of the peninsula of Hel ships can steer into the harbour, free of all obstacles to navigation, on a true course W.S.W.

The roadstead outside the harbour, with a depth of 9-14 metres (30-45 ft.) has a sandy bed, providing good anchorage.

The port freezes over only in exceptionally hard winters, and even then it is kept open for traffic by ice-breakers.

Detailed Description of the Harbour

Gdynia Harbour is composed of an Outer Harbour and Inner Harbour connected by a common Outer Basin to which leads the main entrance from the sea. (See Supplement).

Outer Harbour.

The Outer Harbour includes, apart from the Outer Basin and to the south of it, three large basins of a combined water-space of about 80 hectares (197½ acres). These are: the Coal Basin, water-space about 33 hectares (81½ acres); the South Basin, water-space about 23 hectares (57 acres); and the President's Basin, water-space about 25 hectares (62 acres). The water-space of the Outer Basin amounts to about 97 hectares (239½ acres).

These basins were formed by four piers flung out into the sea; the Passenger Pier, Coal Pier, Fishing Pier and South

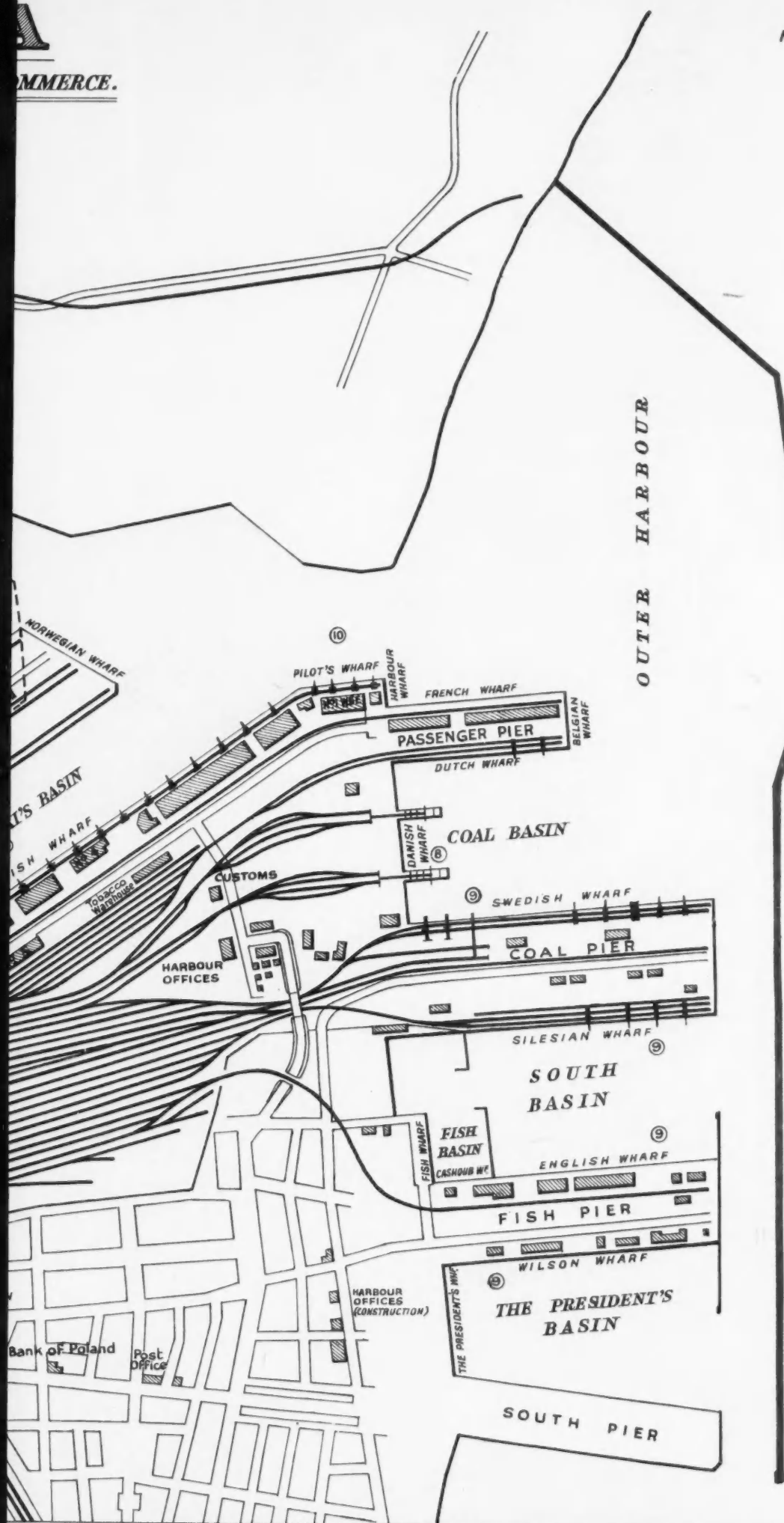
*A New Shed.**Tropical Fruit in a Shed on the Polish Wharf.*

1

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COMMERCE.

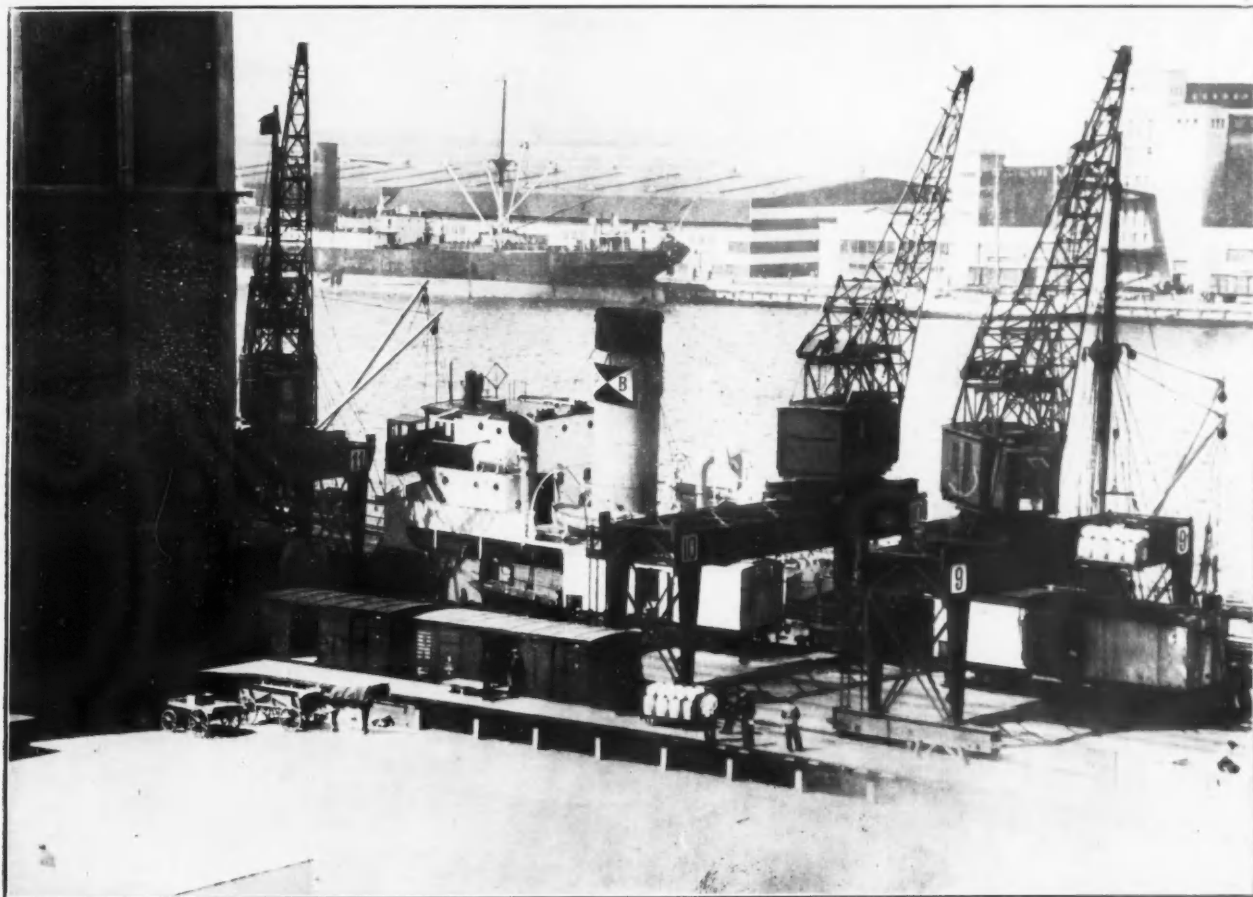


NOTE; Proposed Warehouses shewn RED.
Depths in Metres shewn ⑩

B A L T I C S E A



Port of Gdynia



A Steamer of the Polish-British Steamship Co., loading Eggs and Butter for England. On left, the Port Refrigerator.



The Maritime Station and a General View of the Outer Harbour.

Port of Gdynia—continued

Pier, with an aggregate land area of about 44 hectares (108½ acres).

Entrance.

There are at present three entrances to the harbour: the main entrance to the Outer Basin through the Entrance Canal to the Inner Harbour (140 metres) (458 ft.), and separate ones to the South Basin and President's Basin (each 70 metres) (229 ft.).

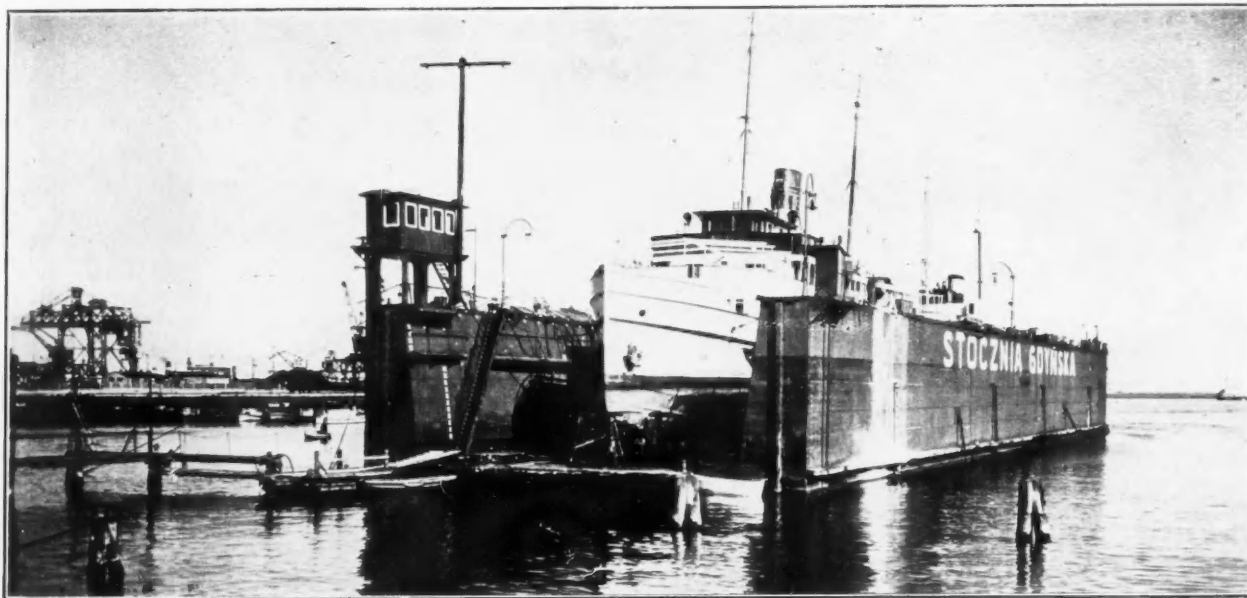
The plans for further expansion of the harbour allow for only two entrances, the main entrance to the Outer Basin and Inner Harbour over against the Entrance Canal, and a second (150 metres wide) (490 ft.) in the southern portion of the Outer Harbour.

The Silesian Wharf, 758 metres (2,479 ft.) long, depth 9 metres (29½ ft.), forms the southern part of the Coal Pier. This is intended for loading coal for export. Coal is transhipped by means of four 7-ton cranes.

Among the apparatus for coal transhipment must be mentioned the 7-ton floating crane of the firm "Poldag."

The various appliances in use for coal transhipment have an aggregate capacity of over 620 thousand tons per month.

Just beyond the area reserved for the coal trade on the Silesian Wharf, are small reservoirs for oil and petrol on ground leased to the firm "Gazolina." These serve for supplying fishing cutters with liquid fuel and lubricating oils and for bunkering ships.



The Floating Dock.

Passenger Pier.

The Passenger Pier, to the south of the Entrance Canal and dividing the Outer Basin from the Coal Basin, is 400 metres (1,308 ft.) long and 120 metres (392 ft.) wide. It possesses three wharves: the French Wharf (to the north), the Belgian Wharf (to the east) and the Dutch Wharf (to the south).

The depth at this pier is 12 metres (39 ft.), permitting the approach of the largest ocean liners.

The French Wharf is destined for long-distance passenger and emigration traffic and for shipment of miscellaneous cargo demanding, especially by sea, rapid transport. Here, therefore, have been built a Maritime Station and a warehouse for goods in transit from one State to another. The Maritime Station is equipped for the reception and dispatch inland of passengers, mail and luggage, for customs and passport activities and for emigration traffic. The warehouse has heated storage space for cargoes which require this.

This warehouse is served by two semi-portals cranes of long reach and each with a lifting capacity of three tons.

The Dutch Wharf, where there is a depth of 10 metres (33 ft.), is used for the time being, for the discharge of scrap iron, iron ore and other bulk cargo and heavier miscellaneous goods. This wharf is served by seven seven-ton general cranes travelling on four crane-tracks.

Coal Basin and Pier.

The shipment of coal for export is concentrated in the Coal Basin and on the Coal Pier. In the western part of the Basin, on the Danish Wharf, 390 metres (1,275 ft.) long, depth 8 metres (26 ft.), are installed, on two piers jutting out to 120 metres (392 ft.), two-belt conveyors combined with a wagon tippler. These machines have a loading capacity of over 650 tons per hour each.

In the southern part of the Coal Basin, on the western portion of the Swedish Wharf, 780 metres (2,551 ft.) long, depth 8 and 9 metres (26 ft. and 29½ ft.), are installed three bridge-cranes (one 5 ton and two 7 ton) and an automatic scale (200 ton) for the transhipment of coal and bulk cargoes such as iron ore, phosphates and pyrites.

The further part of the wharf is exploited, together with the adjacent ground, by the Upper-Silesian Coal Concern "Robur," represented in the port by the firm "Polskarob." On this part of the wharf coal is loaded by means of four 7-ton grab-cranes and one coal wagon tippler with a capacity of 450 tons per hour.

The South Basin.

The South Basin, between the Coal Pier and Fishing Pier, has a water-space of about 23 hectares (57 acres) and a total wharf length of about 176.6 metres (577 ft.). The depth at these wharves varies from 1½ to 9 metres (14½ ft. to 29½ ft.).

The South Basin has at present a separate entrance direct from the roadstead. It is intended, as the construction of the harbour continues, to abolish this entrance and replace it by one from the north, from the side of the Outer Harbour or from the south along the breakwater.

In the north-west and south-west parts of this basin two small auxiliary basins have been separated off by wooden piles, the north-west one with the ground adjacent to it being used by the Gdynia Shipyard. At this yard there are repair workshops, a floating dock of 3,500 tons dead-weight capacity and a 50-ton floating crane. The South-West Basin, with the Fish Wharf and Kaszub Wharf, is intended as a station for fishing cutters. On the wharf, between the basins, is a slipway for fishing cutters.

The Fishing Pier.

The English Wharf at this pier serves for deep-sea fishery. Here is the Fish Hall with a storage space of about 2,500 square metres, fitted up with the most modern freezing plant, a small ice-factory, an auction hall for trade, a sorting department and storage space for fresh and frozen fish.

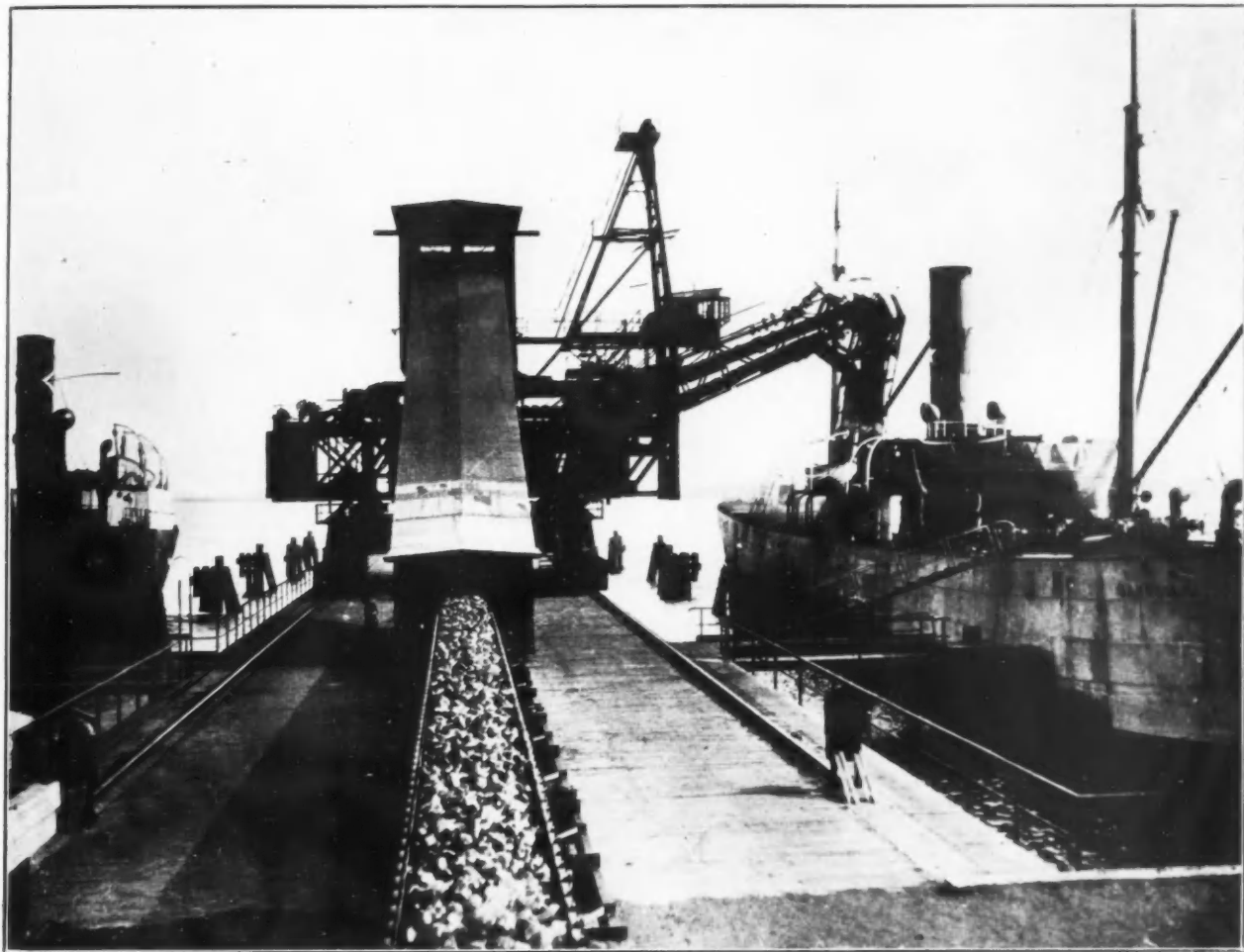
Beside the Fish Hall on the Kaszub Wharf there are a few warehouses for storing fish, and also preserving factories, etc.

To the east of the Fish Hall a herring warehouse has been built, with an area of about 2,070 square metres for storing herring catches and also imported herrings.

At the end of the English Wharf are small stores and reservoirs for mineral and lubricating oils belonging to the State Petroleum Concern, "Polmin." These, together with the reservoirs of the firm "Gazolina" already mentioned, serve for supplying ships in port.

On the southern wharf of the Fishing and Wilson Pier, 612 metres (2,100 ft.) long, depth 9 metres (29½ ft.), at the side of the President's Basin, is a medium-sized warehouse (150 square metres) belonging to the shipping firm "Vistula," which maintains regular coastal communication with Danzig and also plies the Vistula, via Tczew, to the interior. Next to this stands an emergency warehouse and workshop (area 1,030 square metres). Finally, 50 metres (163½ ft.) of the wharf has been granted for the time being to the Yacht Club.

Port of Gdynia



A Belt Conveyor for Loading Coal.



S.S. "Songa" discharging American Scrap Iron. In the background is the Polish Wharf.

Port of Gdynia—continued

The President's Basin.

South of the Fishing Pier is the President's Basin, which has a water-space of about 25 hectares (62 acres).

This basin is closed by the South Pier, which is 680 metres (2,224 ft.) long by 120 metres (392½ ft.) wide. At the southern side of the Pier, by the shore, is a small Yacht Basin with a separate entrance from the south.

The President's Basin is used at present for passenger and cargo coastal traffic.

Inner Harbour.

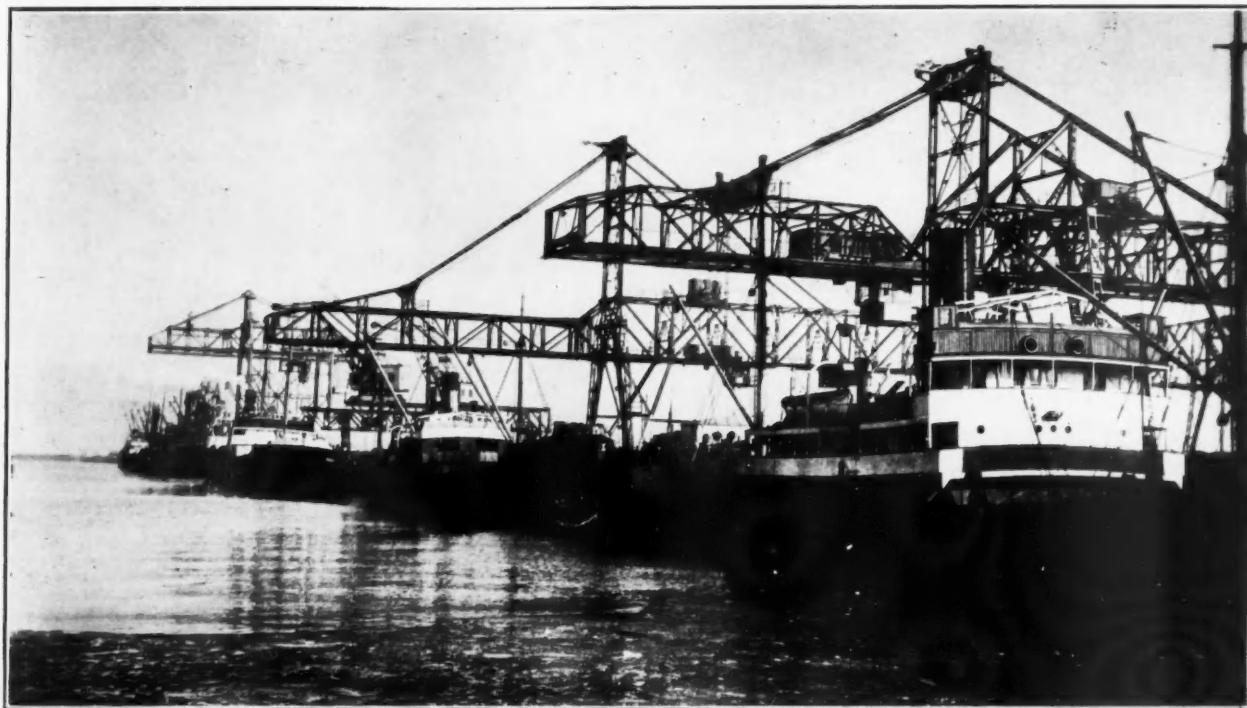
The Inner Harbour consists at present of the Port Canal, excavated inland as a continuation to the north-west of the Entrance Canal for about 2½ kilometres (1½ miles), and two inner basins: Basin No. 1 (Marshal Pilsudski's Basin) and Basin No. 2 (Minister Kwiatkowski's Basin).

of lading. Further on is the warehouse of the forwarding firm "Pantarei," which serves for storing miscellaneous cargo. This warehouse is used also as a base for operations by several regular lines, among others the Polish Transatlantic S. S. Co., plying between Gdynia and America.

State Warehouse No. 3 (exploited area 6,500 square metres, of which 500 square metres is refrigerated cellars) serves as a base for the regular lines Polish-British S. S. Co. and Polish United Baltic Corporation, which maintain regular communication between Gdynia and the English ports of London and Hull. A banana-ripening plant is installed in the cellars of the warehouse.

Port Refrigerator.

The "Port Refrigerator, Ltd.," built in 1930, is equipped with the most up-to-date machinery. It is the second largest



Cranes in the Coal Basin.

The Pilot's Wharf.

The southern side of the entrance to the Inner Harbour is occupied by the Pilot's Wharf, 100 metres (654 ft.) long, depth 10 metres (33 ft.). On this wharf are situated the Harbour-master's Office and Port Shed No. 1 (area 4,000 square metres), which serves for the storage of miscellaneous goods and for the use of the regular lines of the Żegluga Polska and for the Svenska-Orient Line. On the part of the wharf occupied by the Railway Customs Agency is a public customs warehouse. The wharf is served by four portal cranes.

Marshal Pilsudski's Basin.

Situated to the south-west of the Pilot's Wharf is the first inner basin with a water-space of about 27 hectares (66½ acres), width 250 metres (817½ ft.), and depth 10 metres (33 ft.). This basin is enclosed by the Polish Wharf, 1,130 metres (3,696 ft.), the Rotterdam Wharf, 310 metres (1,014 ft.), and the Indian Wharf, 1,009 metres (3,300 ft.).

The Polish Wharf Port Warehouses.

On the Polish Wharf are port warehouses intended for the transshipment and storage of general cargo and cargo of high value. In the first line are one-storey warehouses for short-term storage, in the second are being built long-term storage warehouses of several storeys.

In the first line along the Polish Wharf are a medium-sized postal building for overseas mail and the warehouses of "Cukroport" with a combined area of 18,000 square metres, in which is stored sugar for export to Scandinavia, England, the Levant, etc.

Further on is the industrial establishment of the firm J. Fetter (area 2,470 square metres), which serves for storing and sorting dried fruit imported from the south and for making various fruit preserves to the extent of some 5,000 tons yearly. Beside this is the State Warehouse No. 4 leased by the American Shipping Co., "American Seantic Line," plying regularly between Gdynia and New York. The warehouse, administered by the Railway Customs Agency is also intended for goods forwarded direct from American to Polish railways by a bill

port refrigerator in the world, the largest being at Hamburg. There can be stored here 1,200 wagons of goods requiring a defined low temperature, such as butter, eggs, poultry, bacon, frozen meat, etc. Goods are loaded on to ships by means of a special 1.5-ton covered crane, safeguarding the cargo from dust, rain or change of temperature during loading.

In the second line on the Polish Wharf, opposite the Fetter establishment, is the five-storey warehouse of the State Tobacco Monopoly. This is equipped with modern apparatus and serves for storing and sorting tobacco imported from England, the U.S.A., French N.W. Africa and Italy. In one part of the warehouse is stored for the time being the principal stock of the products of the State Alcohol Monopoly.

Port Warehouse No. 5, also in the second line of buildings on the Polish Wharf, was built for the long-term storage of cargo. It possesses nine electric lifts. Apart from storerooms and the offices of private firms, this building also contains the Port Crane Administration.

The Polish Wharf is served by 15 travelling cranes with a capacity of 1½-3 tons.

The Rotterdam Wharf.

The Rotterdam Wharf (length 310 metres) (1,014 ft.) closes the basin to the north-west. On this wharf are situated: the Free Excise Shed (580 square metres) of the national trust for ships' supplies and for the export of monopoly goods, the provisioning shed "Export-Import" (750 square metres) and Port Warehouse No. 2 (exploited area 13,260 square metres) for storage of bulk cargoes, such as potassium salts, Thomas slag, hydrogen manures, potatoes. The wharf is served by five portal cranes of a capacity of 1½-2½ tons.

The Indian Wharf Port Industries.

The harbour industries are concentrated at the south-west of the Indian Wharf, and consist of the manufacture of finished products from raw or half-finished imports.

The Rice Mill.

The first large private industrial enterprise of the port is the "Rice Mill," built in 1927. The Rice Mill, together with

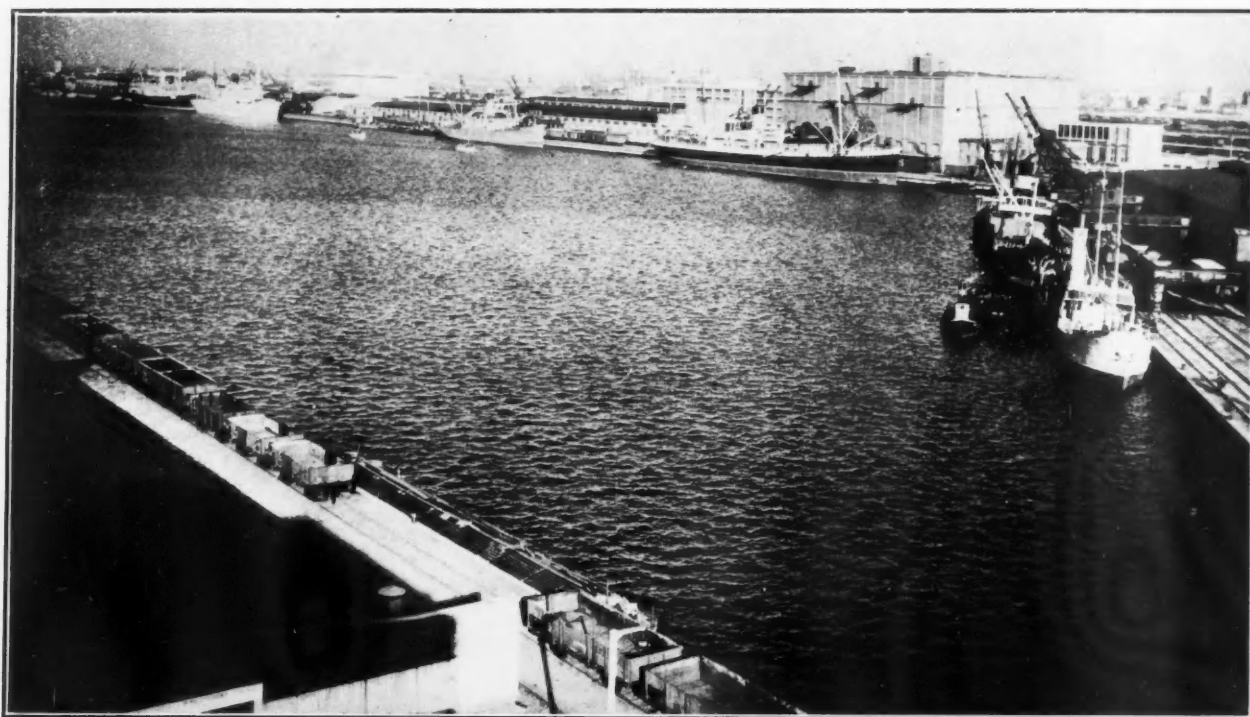
Port of Gdynia



Discharging Motor Cars.



Cotton stored in a Shed in the Free Zone.

Port of Gdynia—continued

Marshal Pilsudski's Basin in the Inner Harbour. In the right background is the Port Refrigerating Plant.

its rice warehouses, occupies an area of about 9,400 square metres. Its annual manufacturing capacity is over 150 thousand tons. The raw rice is imported direct from the British Indies.

Apart from supplying the needs of the home market, the Rice Mill re-exports about 25 per cent. of its products to the Scandinavian and Baltic countries, Czechoslovakia, Roumania, Hungary, partly to Germany, to England and even to the countries of the Levant. By-products, such as rice-flour and bran, are exported by sea to the neighbouring countries, among others to Germany and Holland.

The Oil Mill.

Beside the Rice Mill is the Oil and Fats Mill "Union Ltd., Gdynia," belonging to the international concern, "Unilever-Schicht." The Oil Mill with its warehouses has an exploited area of about 4,026 square metres, and possesses a silo for 6,500 tons of raw materials. This silo is adapted also for the storing of grain, and has an annual capacity of 15-20 thousand tons of grain. The Oil Mill and warehouses possess modern pneumatic and belt conveyors for discharging and handling raw materials. The annual manufacturing capacity of the mill is over 100 thousand tons. Production is based on the manufacturing of raw materials from overseas: dill, soya, palm seed, coconut seed, imported direct from the Argentine, China, India and in some part from Russia. The oil products, $\frac{3}{4}$ machine oil and $\frac{1}{4}$ edible, supply the wants of the home market, and also serve for overseas export. A large place in the export from the Oil Mill is also filled by the by-product oil-cakes.

On reserved territory behind the Oil Mill, close to the Indian Wharf, a modern grain elevator will be constructed in the near future, as a result of preparatory work carried out by the Ministry of Industry and Commerce in collusion with the parties interested. This will serve for export and have a capacity of 10-15 thousand tons of various sorts of grain. The building of this elevator will maintain regular exports of corn, which have hitherto been carried out in a fortuitous manner owing to the lack of suitable apparatus in the harbour.

Minister Kwiatkowski's Basin.

The second basin of the inner harbour, 16 hectares (39½ acres) water-space, is Minister Kwiatkowski's Basin. In this basin the United States Wharf, 820 metres (2,682 ft.) long, parallel to the Indian Wharf and north-west of it, together with the Norwegian Wharf, 260 metres (850 ft.) long, forms the first pier of the inner harbour.

Cotton Warehouses.

The north-east part of the United States Wharf serves for the transhipment of cotton imported direct from the producing countries for the needs of the home market and for transit to Czechoslovakia and Roumania. A special cotton warehouse (No. 6) with an exploited area of 12,000 square metres and

with ramps and doors at both sides has been erected for the service of this trade. Miscellaneous cargo can also be stored here. This wharf and warehouse are served by eight 3-ton semi-portal cranes.

SPECIFICATION OF THE HARBOUR EQUIPMENT AT NOVEMBER, 1935.

Specification	Total
Harbour area hectares	950 (2,075 acres)
Water-space in hectares	350 (864 acres)
Depth of the Harbour in metres	6-12 (19½-39 ft.)
Length of breakwaters in metres	4,255 (13,917 ft.)
Wharves already in use in metres	12,218 (39,963 ft.)
Number of cranes now in use	58
Tonnage of cranes	231.5
Automatic scale for ore	1
Coal tip, 32 tons	1
Belt Conveyors (650 tons per hour)	2
Floating crane, 50 tons	1
Floating Dock, 3,500-ft.	1
Storage surface, square metres	190,000
Harbour railway track, kilometres	168 (104 miles)

The harbour also possesses special apparatus, such as: a refrigerating and cold storage plant, a fish hall and refrigerator, a rice-husking mill, an oil mill, an establishment for making preserves of tropical and dried fruit, reservoirs for molasses of 14,800 tons capacity, a floating dock and ship repair workshop, a coal and oil bunkering station, a maritime station, a harbour fire-station and the necessary equipment for pilot and tug boats.

Railway Installations.

In Gdynia Harbour wharf-side railway tracks and shuntings are rapidly constructed, as soon as the need arising from the port turnover dictates. Especially well developed are the tracks for transporting large quantities of coal to the harbour. The combined length of railway track in the harbour amounts to 168 kilometres (104 miles).

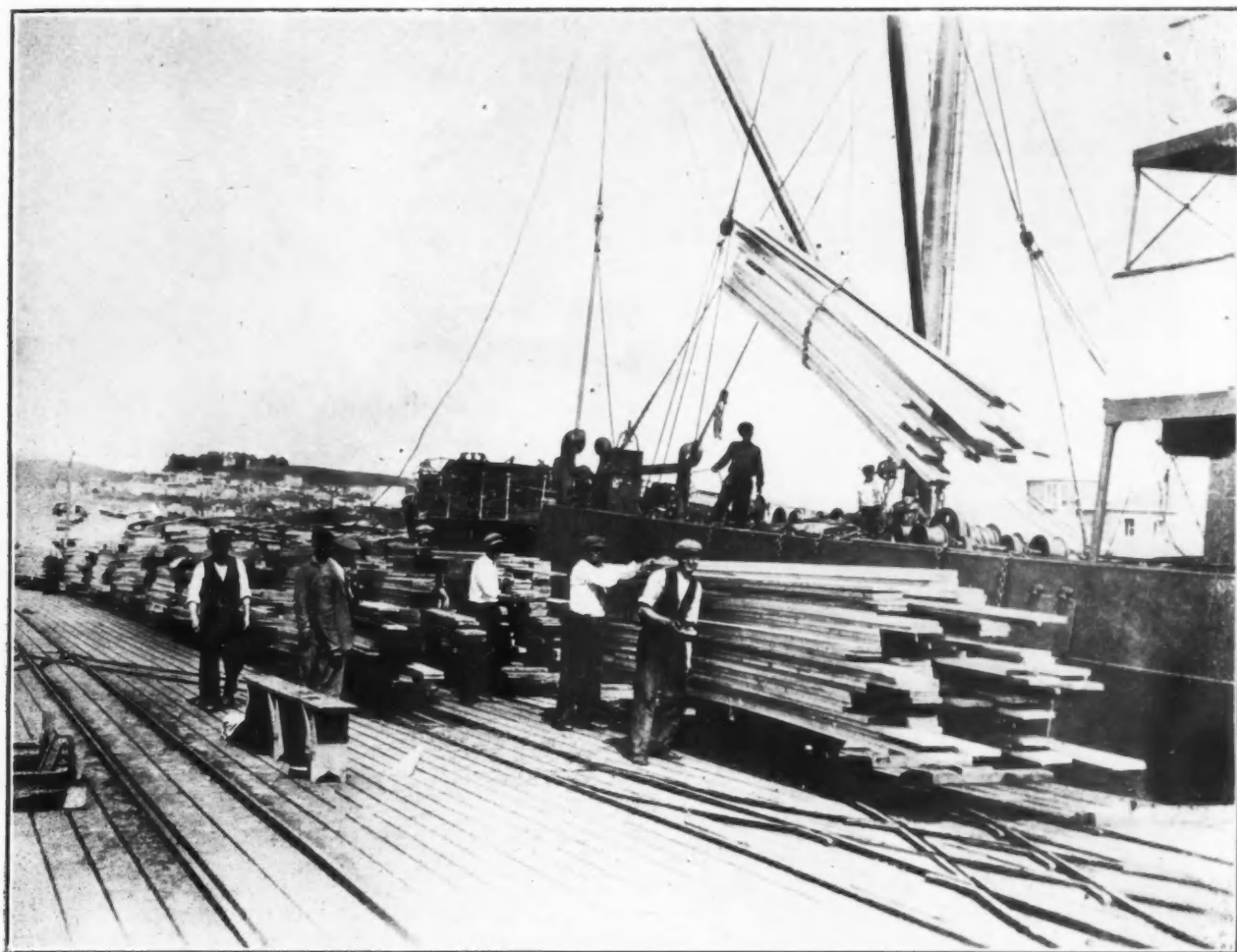
Expansion of the Harbour: Free Customs Zone

The future programme of harbour extension includes the expansion of the Port Canal intended to serve the adjacent territory on which are to be constructed industrial establishments.

New Equipment and Warehouses.

The whole United States Wharf (Minister Kwiatkowski's Basin) is now open for use and at the same time, just beyond warehouse No. 6, two warehouses have been built of the same storage area (12,000 square metres each) for miscellaneous cargo. Also in the second line of warehouses, behind warehouse No. 6, is to be built a warehouse for long-term storage of cotton and miscellaneous cargo. The wharf now has four additional 3-ton cranes.

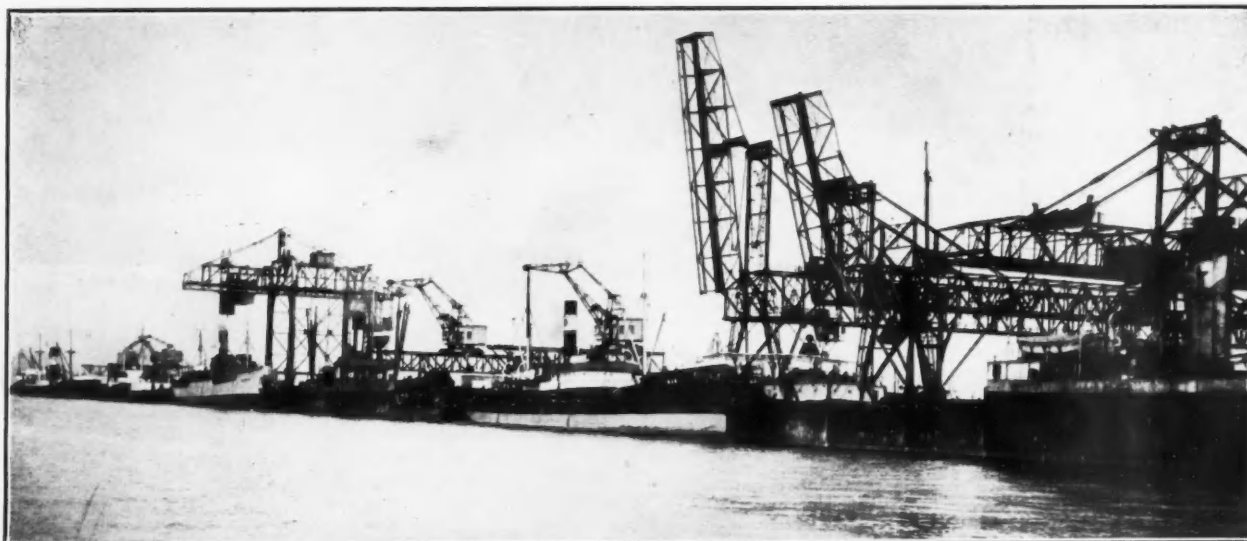
Port of Gdynia



Loading Polish Timber.



Unloading Herrings from Great Britain.

Port of Gdynia—continued*Bridge Cranes and Coal Tip in the Coal Basin.*

Also on the Passenger Pier, in front of the warehouse for goods in transit between different States, are two cranes of specially wide reach for large transatlantic ships, and on the Dutch Wharf of this pier two more cranes for scrap iron, each of a capacity of five tons.

The Free Customs Zone.

In the autumn of 1933, a Free Customs Zone was opened in the south-west part of the Inner Harbour.

This comprises Minister Kwiatkowski's Basin with the United States, Czechoslovakian and Roumanian Wharves, the warehouses built on them and the cranes and railway tracks serving the basin and the adjacent territory.

In this manner there has been formed for the time being an area shut off as a free customs zone and capable of rational extension as the need for it increases.

Private Initiative.

The large part played by private enterprise in the construction of Gdynia Harbour needs to be stressed. The fundamental work, such as the construction of basins, wharves, etc., is carried out at the cost of the State, but a considerable part of the transshipment apparatus and about 40 per cent. of the warehouses have been established by private firms. Private capital plays an even larger part in the establishment of industries in the harbour and the development of the town of Gdynia.

Advantages of the Geographical Position of the Port of Gdynia***Hinterland.***

The advantageous geographical position of the Port of Gdynia, coupled with its considerable economic hinterland, provide favourable conditions for expansion.

Gdynia, lying at the point of separation of trade routes

from or through Poland, from south to north, draws upon a wide series of routes extending southwards to the spheres of the Adriatic and Black Sea ports. It also forms a natural transition base for communication from Scandinavia through the Carpathians to the Balkans.

Gdynia, then, enjoys an exceedingly favourable situation as a separating point in the trade of the northern and eastern Baltic.

For many Polish economic areas the Port of Gdynia is in fact the nearest port either geographically or in consideration of railway facilities. As the port and its equipment continue to develop constantly new categories of goods from the whole of Poland or for Poland pass through the Polish Port.

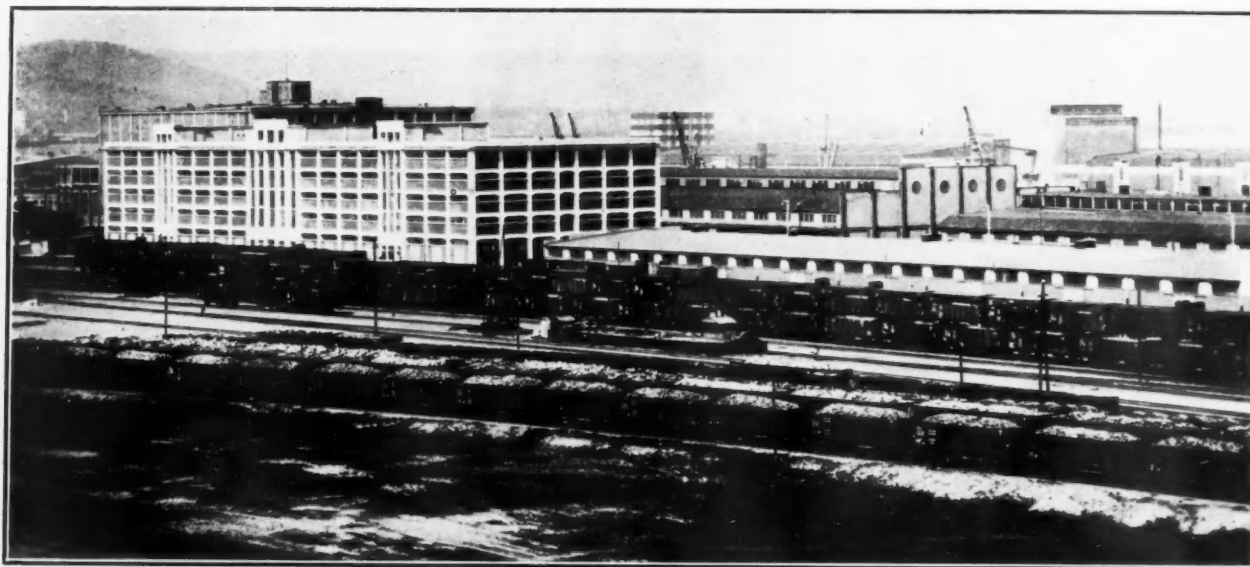
The Coal Fields supply coal to the port and at the same time obtain through it raw materials, such as scrap iron and ore for the foundries. Sugar and corn come from Poznan and the central provinces. A considerable turnover in a whole series of other articles also binds Gdynia up with all the more important economic centres of the country.

In transit by sea and land there is a constantly growing connection of Gdynia with Czechoslovakia, Roumania and Hungary. There are also large possibilities of transit through Gdynia of goods for or from Yugoslavia, Austria and southern Russia.

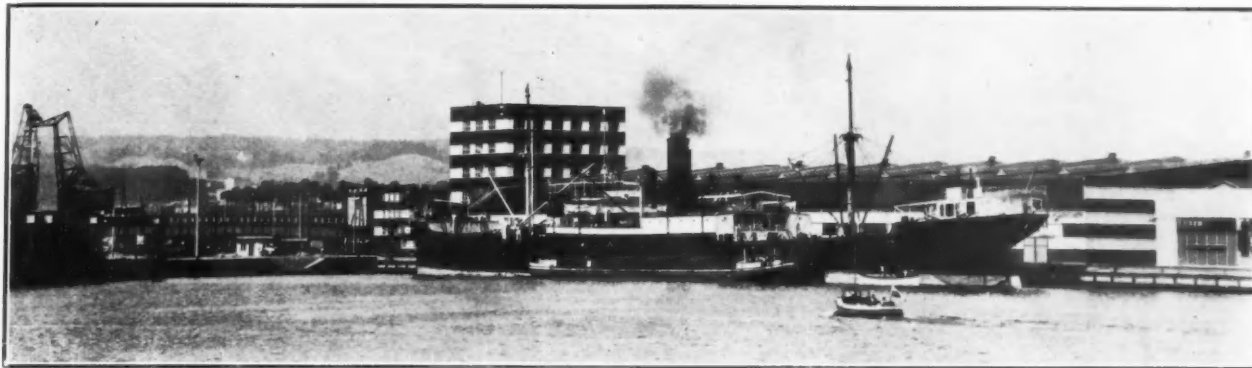
Among the goods passing in transit through Gdynia must be mentioned: raw materials for the foundries, semi-precious metals, cotton, wool, skins, celluloid, paper, timber, certain food products and fruit.

The goods traffic between the Port of Gdynia and its hinterland is carried on almost exclusively by rail.

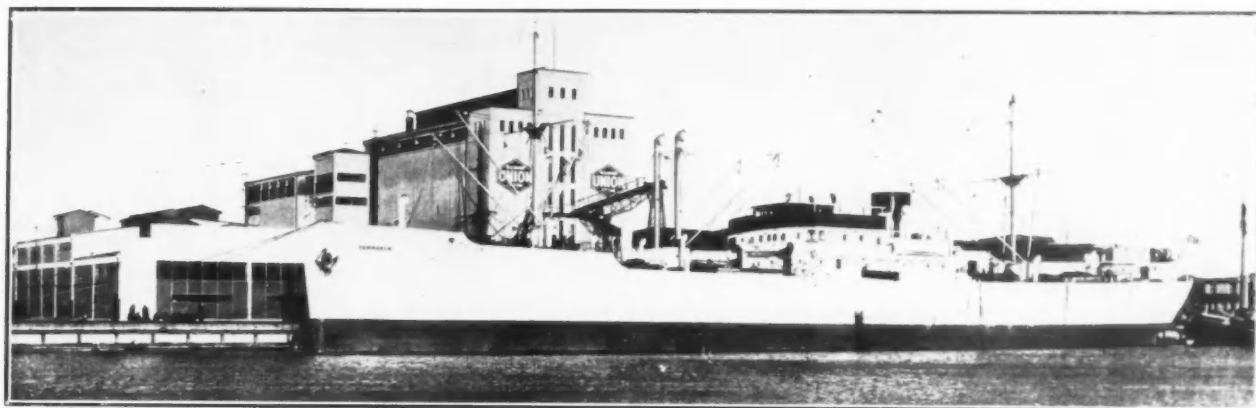
The deciding factor for the development of the Port of Gdynia, basing as it does its goods connection with its hinterland mainly on railway transport, is a system of maritime freights adapted alike to the national railway freights and to freights for industrial unions.

*Sheds in the Inner Harbour. In the foreground, Wagons loaded with Upper Silesian Coal for Export.*

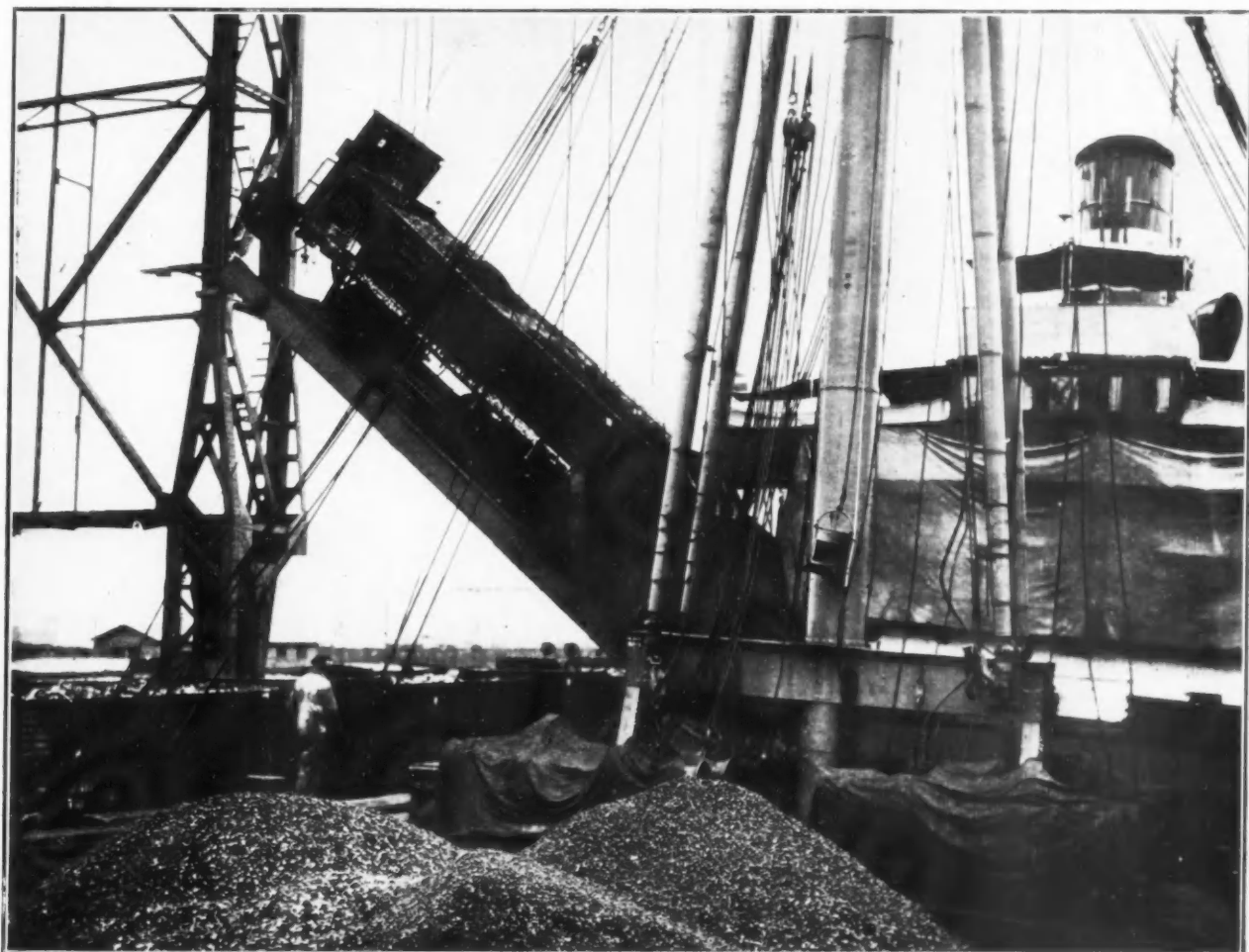
Port of Gdynia



Discharging Raw Rice for the Rice Mill.



A South African Liner discharging Raw Material for the Oil Mill.



A Wagon Tippler at Work.

Port of Gdynia—continued

Reductions in Port and Customs Dues.

At the end of 1931 preferential maritime customs were established as a means of encouraging the exchange of Poland's goods by the maritime route, which is the most advantageous for her economic life.

As far as port dues are concerned the Port of Gdynia is one of the cheapest of the North Sea and Baltic.

The following dues are payable:—

- (1) for entry and departure (harbour dues)
- (2) on cargo
- (3) passenger dues
- (4) wharfage dues
- (5) berthing dues
- (6) pilotage and towage dues.

The scale of payment in force allows for a series of exemptions and reductions among which must be specially emphasised the reductions for regular lines.

Equally low in comparison with other ports are the dues charged at Gdynia for craning and warehousing.

Maritime Connections.

The development of its maritime connections is of no less importance to the Port of Gdynia than the cheapness and efficiency of its railway connections. This development took place almost as rapidly as the technical construction of the harbour and the growth of its goods turnover.

Gdynia possesses at present 38 regular maritime connections, binding it up with nearly all the most important ports of the world, whose number amounts to 119.

In connection with the meeting of maritime trade routes in Gdynia, special mention must be made of the co-ordinating work of certain local Baltic lines, such as "Finska Anfartygs Ltd." or the "Zegluga Polska Baltic Line" or the "Svenska Orient Linjen." Cargoes for the Near East from the countries served by these local lines are transhipped at Gdynia on to the long-distance ships of the "Svenska Orient Linjen" and so reach their port of destination. The expansion of this transshipment business encourages the supposition that Gdynia will become, in the near future, the central transshipment port of the Baltic, so obtaining great significance in international commerce.

Gdynia as a Commercial and Transshipment Port

The development of the commercial and transshipment harbour testifies to the dynamic energy of Gdynia's economic life.

The development of the transshipment facilities of the harbour is dependent on the goods turnover and this conversely is in large measure dependent on the transshipment facilities. By development of the commercial harbour must be understood the enlivenment of the local Gdynia market and the equipment of the harbour with all apparatus essential for proper and efficient circulation of goods.

Expansion of Goods Turnover.

The following table indicates the place occupied in Poland's foreign trade by Gdynia's goods turnover during recent years:

Year	Foreign Trade Turnover (in thousand tons)	Through Gdynia (in thousand tons)	Percentage
1929	26,125	2,620	10.0
1930	22,493	3,275	14.5
1931	21,634	5,300	24.0
1932	15,290	5,194	34.0
1933	15,343	5,683	37.0

Gdynia's place in the total exports of Poland:—

Year	Total Export (in thousand tons)	Through Gdynia (in thousand tons)	Percentage
1929	21,037	2,402	11.0
1930	18,922	2,932	15.0
1931	18,703	4,742	25.0
1932	13,504	4,761	35.0
1933	12,986	4,987	38.4

Gdynia's place in the total imports of Poland:—

Year	Total Import (in thousand tons)	Through Gdynia (in thousand tons)	Percentage
1929	5,088	218	4.0
1930	3,571	343	9.5
1931	2,931	558	19.0
1932	1,787	433	24.0
1933	2,356	696	29.5

These figures clearly indicate the growing importance of Gdynia in Poland's foreign trade. In 1933, for instance, over one-third of Poland's total foreign goods turnover passed through Gdynia, whereas in 1931 not so much as a quarter took this route.

The overseas goods turnover of Gdynia between 1929 and 1933 shows an increase of 105 per cent.

This considerable increase in the goods turnover of Gdynia is proof of the extreme importance to its economic life of free

access to the sea and of the possibility of direct commercial relations with foreign lands through its own port.

Coal occupied the first place in Gdynia's exports for the year 1934, amounting to 83 per cent. of the total exports. The first place among imports is held by scrap iron, amounting to 22 per cent. of the total imports.

Exports.

The following table illustrates the exports of the more important categories of goods in 1934 in comparison with the four previous years.

	1934 Tons	1933 Tons	1932 Tons	1931 Tons	1930 Tons
Coal	5,180,169	4,427,274	4,199,893	4,167,018	2,808,829
Planks & Lathes	193,039	238,801	47,133	11,745	2,038
Logs, Poles, Pit-props	4,697	12,399	40,886	15,075	—
Sugar	101,281	93,871	88,309	115,529	89,736
Bacon	23,939	38,265	51,878	51,821	11,136
Railway Lines	47,720	26,012	18,122	10,290	—
Nitrates	21,659	23,804	47,810	8,908	3,036
Oil Cakes	23,809	17,176	5,079	1,906	1,033
Eggs	16,463	12,442	6,960	5,601	444
Zinc	9,392	10,929	10,943	15,142	132
Paper	11,904	8,615	5,903	1,730	—
Potassium	5,276	7,908	7,303	32,791	19,366
Rice, Flour	1,576	6,680	5,096	6,487	9,399
Haus	2,802	4,490	8,579	7,608	1,033
Celluloid	6,729	3,543	7,613	105	144
Husked Rice	2,260	2,680	5,650	21,171	3,594
Molasses	8,730	—	7,400	1,100	—
Rye	1,110	—	1,628	18,680	8,290
Potatoes	2,434	1,163	6,733	15,572	—

This table shows the considerable changes which have taken place in the relative importance of different articles of export.



M.S. "Pilsudski, a new transoceanic liner of the Gdynia-America Line, built in 1935.

Imports.

The same can also be observed with regard to imports. The following illustrates the imports of the more important categories of goods in 1934 in comparison with the four previous years.

	1934 Tons	1933 Tons	1932 Tons	1931 Tons	1930 Tons
Scrap Iron	314,093	329,809	123,907	341,901	272,479
Cotton	81,928	77,733	26,839	6,063	564
Raw Rice	44,964	53,798	44,755	75,286	46,864
Oil Seeds	81,798	46,606	19,368	2,053	—
Thomas Slag	40,908	44,937	46,416	71,205	85,315
Pyrites	67,037	43,026	27,529	—	10,973
Phosphates	59,472	39,564	17,402	13,076	13,885
Iron Ore	26,951	32,334	30,858	21,742	41,230
Fresh & Dried Fruits	31,376	30,891	22,604	2,102	614
Herrings	21,872	20,635	8,289	1,503	—
Skins	30,781	16,638	8,641	249	104
Wool	18,335	15,370	5,083	31	—
Jute	11,764	11,768	4,654	—	—
Tanning	12,136	10,406	2,691	244	95
Coffee	3,627	8,420	2,491	47	—
Paper	9,385	8,211	6,636	1,314	—
Cocoa	5,585	6,369	3,583	95	—
Tobacco	5,922	4,944	5,231	4,495	982
Rubber	7,976	3,755	2,323	148	—

In the development of import trade must be specially emphasised the importance of the appearance of miscellaneous and high-value cargoes, such as fresh fruit, colonial produce, herrings, skins, tanning, cotton, jute, oil seed, etc.

The variety of imports is of great significance for the further expansion of the Port of Gdynia.

The figures quoted above show clearly the firm position held by Gdynia in international trade, despite the persistent world crisis, despite the tariff restrictions obtaining in almost all

Port of Gdynia—continued

States, and despite the considerable shrinkage of production based in many cases on imported raw materials. The following table also illustrates the constant increase of Gdynia's overseas goods turnover:—

Year	Import	Export	Total Turnover
1924	981	9,186	10,167
1925	1,646	53,925	55,571
1926	310	401,251	401,561
1927	6,411	891,683	898,094
1928	192,712	1,765,058	1,957,770
1929	329,644	2,492,858	2,822,502
1930	504,117	3,121,631	3,625,748
1931	558,549	4,741,565	5,300,114
1932	432,888	4,761,400	5,194,288
1933	870,704	5,235,162	6,105,866
1934	991,545	6,200,368	7,191,913

Ship Traffic.

The number of ships which put into Gdynia increased in 1934 in comparison with former years. The following table indicates the growth of ship traffic:—

Year	Ships Entering			Ships Leaving		
	Number	Net Annual Tonnage		Number	Net Annual Tonnage	
1924	29	40,469		29	40,469	
1925	85	74,919		79	71,549	
1926	312	209,928		316	213,086	
1927	542	426,722		532	421,226	
1928	1,108	984,893		1,093	972,902	
1929	1,567	1,442,492		1,575	1,445,400	
1930	2,238	2,029,822		2,219	2,014,299	
1931	3,144	2,649,568		3,148	2,665,399	
1932	3,610	2,831,604		3,604	2,838,598	
1933	4,355	3,425,660		4,337	3,401,065	
1934	4,592	4,142,142		4,597	4,153,564	

The most heavily represented States in Gdynia's ship traffic are the Scandinavian countries. This is perfectly natural in consideration of the geographical situation of Gdynia, enabling it to connect up maritime with land routes in the communication of North and South. The table at the bottom of this page reveals the part played by the various countries in the years 1926-34 inclusive, in the traffic of the port.

The increasing part played by the Polish merchant marine in the service of the port also demands attention. The following gives, in tons, the amount of cargo carried by it in recent years:—

Year	Total Cargo Carried Tons	Exports Tons	Imports Tons	Between Foreign Ports Tons
1930	858,000	619,000	149,000	90,000
1931	1,060,000	870,000	124,000	66,000
1932	1,086,000	913,500	95,000	77,500
1933	861,340	698,961	115,964	46,415
1934	960,993	715,541	169,920	75,532

The results here given of the work of the Polish merchant marine are extremely imposing, if only in consideration of the general shrinkage of Polish foreign trade due to the unsatisfactory freightage situation and to the competition of foreign shipping companies.

Countries	1926				1930				1931				1932				1933				1934			
	No.	Tonnage	Per cent.	No.	Tonnage	Per cent.	No.	Tonnage	Per cent.	No.	Tonnage	Per cent.	No.	Tonnage	Per cent.	No.	Tonnage	Per cent.	No.	Tonnage	Per cent.	No.	Tonnage	Per cent.
England	1	614	0.3	40	62,585	3.05	94	142,963	5.44	57	100,382	3.53	108	170,363	5.00	213	346,617	8.87	—	—	—	—	—	—
Argentina	—	—	—	—	—	—	—	—	—	1	1,268	0.05	—	—	—	—	—	—	—	—	—	—	—	—
Austria	—	—	—	4	716	0.04	—	—	—	—	—	—	—	—	—	1	134	0.01	—	—	—	—	—	—
Belgium	—	—	—	4	4,451	0.23	—	—	—	—	—	—	2	7,144	0.21	—	—	—	—	—	—	—	—	—
Bolivia	—	—	—	—	—	—	2	386	0.01	3	579	0.02	—	—	—	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	1	2,228	0.08	1	2,701	0.10	1	3,373	0.09	—	—	—	—	—	—	—	—	—
Czechoslovakia	—	—	—	3	734	0.03	6	870	0.03	16	6,040	0.21	46	9,217	0.25	20	4,420	0.11	—	—	—	—	—	—
Denmark	29	17,457	8.4	201	190,116	9.46	279	214,513	8.08	484	394,620	11.79	593	372,066	10.92	623	428,788	10.30	—	—	—	—	—	—
Estonia	4	1,970	0.9	38	22,849	1.14	117	76,148	2.79	132	78,961	2.83	105	54,649	1.58	95	44,889	1.07	—	—	—	—	—	—
Finland	3	7,811	3.7	31	27,603	1.33	83	81,015	3.04	100	75,503	2.70	165	156,323	4.54	178	219,563	5.23	—	—	—	—	—	—
France	21	35,961	17.1	53	145,042	7.17	23	48,125	1.81	12	10,335	0.37	15	21,947	0.64	14	27,380	0.66	—	—	—	—	—	—
Danzig Free City	21	7,496	3.6	75	15,850	0.77	25	12,712	0.48	97	7,621	0.29	55	10,345	0.29	31	24,408	0.64	—	—	—	—	—	—
Greece	—	—	—	1	1,696	0.08	8	21,635	0.81	21	53,950	2.04	42	101,516	2.89	65	164,178	3.99	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—	—	—	—	2	5,098	0.15	—	—	—	—	—	—	—	—	—
Holland	2	258	0.1	10	3,073	0.15	12	6,683	0.25	67	35,356	1.17	128	48,854	1.42	123	81,506	1.96	—	—	—	—	—	—
Iceland	—	—	—	—	—	—	1	566	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Japan	—	—	—	1	4,227	0.22	1	3,409	0.13	—	—	—	—	—	—	2	7,697	0.19	—	—	—	—	—	—
Jugoslavia	—	—	—	—	—	—	2	6,816	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	—	—	—	—	—	—	—	—	—	3	10,112	0.24	1	3,282	0.08	—	—	—	—	—	—
Lithuania	10	4,698	2.2	11	6,242	0.31	26	13,395	0.50	12	5,701	0.21	7	3,621	0.11	12	6,082	0.14	—	—	—	—	—	—
Latvia	14	10,529	5.0	123	125,172	6.03	151	126,219	4.93	83	84,319	2.98	93	93,796	2.78	53	49,483	1.21	—	—	—	—	—	—
Germany	47	20,273	10.0	397	267,270	13.27	631	376,999	14.32	632	318,920	11.22	849	512,857	15.03	808	504,529	12.15	—	—	—	—	—	—
Norway	21	14,479	6.1	152	129,266	6.36	228	182,849	6.86	248	221,359	7.67	350	265,820	7.86	421	335,302	8.09	—	—	—	—	—	—
Panama	—	—	—	—	—	—	—	—	—	2	2,061	0.07	7	17,274	0.51	5	9,507	0.23	—	—	—	—	—	—
Persia	—	—	—	2	232	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poland	4	1,688	0.9	298	360,464	17.58	355	485,386	18.16	447	540,564	19.19	472	521,375	15.18	444	470,610	11.46	—	—	—	—	—	—
Russia	—	—	—	—	—	—	1	596	0.02	—	—	—	—	—	—	8	16,800	0.38	—	—	—	—	—	—
Roumania	—	—	—	—	—	—	1	2,866	0.11	1	2,428	0.04	2	5,024	0.18	7	17,004	0.35	—	—	—	—	—	—
U.S.A.	—	—	—	47	145,020	7.16	39	120,282	4.53	40	127,675	4.56	56	159,744	5.22	79	250,177	6.03	—	—	—	—	—	—
Sweden	134	83,768	40.4	746	514,836	25.43	1,052	719,497	27.22	1,147	801,513	28.28	1,245	827,861	24.09	1,310	894,648	21.64	—	—	—	—	—	—
Turkey	1	2,926	1.3	—	—	—	—	—	—	—	—	—	1	2,041	0.06	—	—	—	—	—	—	—	—	—
Hungary	—	—	—	—	—	—	5	362	0.01	1	1,396	0.05	1	2,523	0.07	3	7,558	0.18	—	—	—	—	—	—
Italy	—	—	—	1	2,378	0.19	1	2,745	0.11	6	17,752	0.63	8	22,517	0.69	74	220,434	5.35	—	—	—	—	—	—
Total	312	209,928	100%	2,238	2,029,822	100%	3,144	2,649,268	100%	3,610	2,831,604	100%	4,355	3,425,660	100%	4,592	4,142,142	100%	—	—	—	—	—	—

Passenger Traffic.

Among the general figures given must be the passenger traffic of the port.

Year	Arrivals	Departures	Total
1924	1,190	6,377	7,567
1925	1,065	10,632	11,697
1926	811	6,990	7,801
1927	1,368	8,172	9,540
1928	3,215	20,007	23,222
1929	5,970	17,591	23,561
1930	6,781	17,388	24,169
1931	7,873	7,603	15,476
1932	10,137	7,705	17,842
1933	10,638	9,998	20,636
1934	9,203	9,189	18,392



The Maritime Station.

The shrinkage in passenger traffic since 1930 is entirely dependent on the immigration restrictions imposed by all States in America and on the complete cessation of emigration from Poland. However, a series of new regular shipping connections forms a basis for further development in this direction also. The building of the Maritime Station on the French Wharf was undertaken in order to secure for passengers full convenience and to enhance the efficiency of passenger traffic in the port.

Commercial Development of Gdynia.

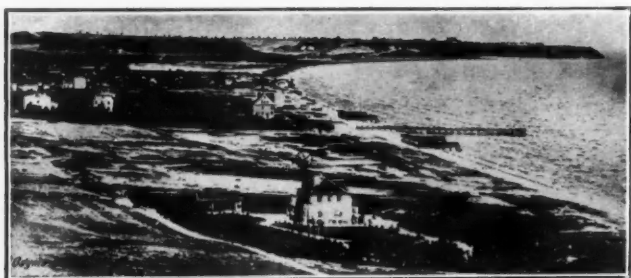
The goods turnover of Gdynia and Danzig for the year 1933 compares with that of foreign ports as follows:—

Turnover in Tons				
Gdynia	...	...	...	6,105,866
Danzig	...	...	...	5,152,894
Antwerp	...	...	...	17,345,000
Bordeaux	...	...	...	4,106,118
Bremen	...	...	...	5,188,000
Hamburg	...	...	...	19,580,000
Copenhagen	...	...	...	5,374,000
Le Havre	...	...	...	4,434,436
Marseilles	...	...	...	8,221,887
Rotterdam	...	...	...	21,602,000
Rouen	...	...	...	8,409,361
Stettin	...	...	...	4,530,000
Trieste	...	...	...	3,019,323

Port of Gdynia—continued

From these figures it may be seen that Gdynia is constantly advancing to a front place among the greater European ports from the point of view of goods turnover. In 1934 she occupied first place amongst the Baltic ports, having out-stripped Copenhagen, Stettin and Stockholm.

The present development of Gdynia as a port of transshipment, handling already 37 per cent. of the tonnage of Poland's foreign turnover, calls for parallel systematic development of Gdynia's commercial resources.



The Territory of the Present Harbour in 1913.

Thanks to its splendid organisation for commerce, the Port of Gdynia has become an important centre for the trade in raw fibre materials (cotton, jute, etc.) and has every prospect of the creation of large cotton stores not only for Poland but for a whole series of countries using Gdynia as their port of transit.

The installation of apparatus for the discharge and stowage of such material makes for this result, as do also the equipment of the harbour in special machines and apparatus for transshipment and the acquirement of direct maritime connections with the producer countries.

The opening of an Exchange for skins in Antwerp and the recognition of Gdynia as the port of arbitration in the skin

trade have influenced the development of the trade and of the import of skins to Gdynia.

In consequence of the constantly increasing proportion of tropical fruit, fresh and dried, in its general goods turnover, the Port of Gdynia has created particularly convenient conditions for the storage of large quantities of fruit and for the furtherance of that trade for the needs both of home and foreign markets.

Proper use of the port warehouses and refrigerator renders possible the storage of considerable quantities of fruit. The opening of the free customs zone will undoubtedly make for the further expansion of the fruit trade in Gdynia.

Auctions of fruit, organised in the manner of those held in Hamburg, Copenhagen, and Antwerp, enable foreign merchants to obtain fruit on easy terms in the Gdynia market.

The Free Customs Zone.

As mentioned above, a Free Customs Zone has been created in the harbour in order to cope with the further commercial requirements of Gdynia.

The political and economic changes in the formation of Europe have caused a marked shifting of the direction of former international trade routes, occasioning at the same time the rise and expansion of new centres of international maritime trade and the disappearance of the importance of old ones.

One can reasonably presume that the creation of a free customs zone at Gdynia will achieve much for the further expansion of the port and for making of it a new centre of international trade and a distributing point for the whole northern and eastern Baltic.

The free customs zone will make Gdynia in added measure a point of transit and distribution not only for the Baltic and Scandinavian countries, but also for the countries of South and South-East Central Europe, such as Czechoslovakia, Roumania, Austria, Hungary and even a part of southern Russia (the Ukraine), which countries are already naturally gravitating towards the Port of Gdynia.

Irish Harbour Matters

Cork Harbour Board.

At a meeting of the Cork Harbour Board, the General Manager reported that holders of the Harbour Board Stock to the nominal value of £64,386, had agreed to sell their holdings to the Board at the prices offered. The scheme had, therefore, resulted in reducing the capital debt from £103,655 to £99,270. The sum paid for the nominal stock purchased was £50,182, so that there had been a capital saving of £14,204. Another result of the operation had been to reduce the annual charge to revenue in respect of interest from £6,215 to £3,886, an annual saving of £2,329.

By 19 votes to 2, the Cork Harbour Board has adopted the recommendations of a Committee, that liners of 20,000 appendix tonnage and of 20 knots entering the port receive a concession of 20 per cent. of the total tonnage dues.

A letter from the Cunard-White Star Company, which was referred to the Law and Finance Committee, welcomed the proposed concession, but the Board's attention was drawn to the discrimination which would follow the adoption of the formula. They asked to have the wording altered so that the lines using the port would be treated equally.

Mr. Horne contended that the formula, as it stood, excluded all liner companies except the United States Lines, as it was not a paying proposition for the other liner companies to bring ships of the specified tonnage to the port.

Alderman S. French said that the United States Lines were sending their largest ships to Cork, and the Cunard-White Star Company could avail themselves of the concession by acting similarly.

Galway Harbour Scheme.

On receipt of a letter from the Minister for Industry and Commerce, Galway Co. Council appointed Mr. L. E. O'Dea, County Solicitor; Mr. M. J. Kennedy, Co. Surveyor; and the Secretary, Mr. O'Flynn, to attend the ensuing meeting of the Harbour Commissioners.

The Minister said he was required by the Galway Harbour Bill, to fix a day, not less than six months after the passing of the Bill, on which the new Harbour Board would take over the duty, and asked the Council to suggest a day.

The Secretary said that, having regard to the cost of the scheme and to their large guarantee towards cost, the Council were anxious to be represented. The Harbour Commissioners had declined to consent to the re-establishment of the conjoint Development Committee.

Mr. E. Corbett, T.D., said that the Co. Council should not

send any further representatives to the Harbour Commissioners, but they should take action.

At a special meeting of the Harbour Board, the deputation named above attended, and a discussion took place in regard to extension of plans and their preparation, with a view to obtaining contracts next year.

Sir Cyril Kirkpatrick, the London engineer, also attended, and it is understood that a settlement was reached in regard to engineering fees, on the basis of reduced figures.

Belfast Items.

The Belfast Harbour Commissioners have decided to dispense with their steam tender, "Musgrave," after 40 years' service, and to replace it by a new twin-screw vessel 115 ft. in length, driven by Diesel electric machinery, and equipped with fire-fighting and salvage apparatus. The order for this new vessel, which will be capable of acting as tug or tender, and have a speed of 12 knots, has been placed with Messrs. Harland and Wolff, Ltd., Belfast, from whom delivery is expected in the summer of next year.

The tonnage of vessels which arrived at Belfast from January 1st to November 16th, was:—

Coastwise and cross-Channel: 2,844,008, an increase of 200,051 over the corresponding period of 1934; Foreign: 728,750, an increase of 50,419; Non-trading: 82,355, a decrease of 28,305.—Total: 3,655,173, an increase of 222,165.

Bangor Pier Repairs.

Bangor City Council has decided to carry out repairs and painting work to the Bangor Pier during the next three years at an estimated cost of £600. The expenditure is to be distributed over a period of three years. The Pier Committee reported that they had given the question of the pier pontoons their careful consideration, and they recommended that the pontoons be renewed at an estimated cost of £2,000, and that application be made to the Ministry for a loan sanction.

The Council invited a firm of engineers to prepare a report on the pontoons, and they stated:—"The present floating landing stage is in such a condition that it is irreparable and should be replaced at the earliest opportunity." Two schemes were prepared, one for £7,800, but the committee recommended the minor one. The pontoon, constructed 40 years ago, has been in a serious state, and in October the Piermaster, before he could put a patch on it had to pump 25 tons of water out of the pontoon.

Port of Southampton Topics

A Very Satisfactory Year at the Docks.

THE year 1935 has been a most satisfactory one for Southampton Docks. Although at the time of writing the complete figures for the year are not available, it is known that every phase of dock activity has shown an increase, compared with the previous year.

Tonnage entering the port during the year reached the enormous total of 17,650,000 tons, which is an increase of nearly 300,000 tons over the "bumper" year, 1930. The net tonnage inward is estimated to be 990,000 tons more than in 1934, while cargo was up by over 100,000 tons, the estimated totals being 67,000 tons increase on imports and 35,000 increase on exports.

There was also a large increase in passenger traffic. Well over half a million passengers passed through the port, the increase in arrivals being 15,000, and in departures 29,000.

Southampton Docks' statistics for November show an all-round improvement in the trade of the port, compared with the corresponding month of 1934.

The number of ships inward was 210, compared with 183 in November, 1934, and outward the total was 210, compared with 181. The gross tonnage increased by impressive proportions, for inward the figure advanced from 1,181,064 tons to 1,313,215 tons, while outward the total rose from 1,097,019 tons to 1,391,556 tons, giving increases of 132,151 tons inward and 294,537 tons outward.

The net figures were also good, there being an increase of 88,134 tons inward and of 132,509 tons outward. The totals were: inward 716,034 tons, compared with 627,900 tons, and outward 719,324 tons, as against 587,015 tons.

The volume of cargo dealt with during the month showed quite a big jump, as compared with the figures for November, 1934, particularly in regard to exports. Imports reached 51,468 tons, as against 49,840 tons, and exports rose from 36,868 tons to 42,645 tons. The increases were, therefore, 1,628 tons inward and 5,777 tons outward.

With regard to passengers the arrivals numbered 6,050 and departures 9,882, compared with 5,728 arrivals and 8,763 departures in the corresponding month.

"Red Letter" Days in 1936.

Having completed in 1935 a very satisfactory year from practically every standpoint, Southampton looks forward with confidence to 1936.

The coming year will contain many "red letter" days for the docks, the most notable being, of course, the maiden voyage of the new Cunard White Star liner, the "Queen Mary." But there are several other events in the shipping calendar, which indicate that the progress of the last few years will be fully maintained.

The "Queen Mary" is expected, under present arrangements, to leave the Clyde on March 24th and arrive at Southampton two days later. Two months later, on May 27th, the new liner will set out on her maiden voyage to New York.

It is understood in Southampton that there is a possibility of the King and Queen paying a visit to the liner before she begins her maiden trip. Their Majesties were present when the ship first took the water, and the Queen actually performed the launching ceremony.

Two other new ships will also make their maiden voyages from Southampton in the first half of the New Year. The sister ships, "Stirling Castle" and "Athlone Castle," now being built for the Union Castle Line's Cape service, will soon be ready. The "Stirling Castle" is due to arrive at Southampton from the builders' yard on January 31st, and will set out on her maiden voyage on February 7th. The "Athlone Castle" is expected to make her first appearance at Southampton on May 15th, and her first voyage to the Cape is scheduled to start on May 22nd.

More good news for Southampton is contained in the announcement of the Compagnie Generale Transatlantique that when the "Normandie," present holder of the Atlantic "blue riband," returns to service next season she will make Southampton her British port of call, both West-bound and East-bound.

During the past season, the "Normandie" called at Southampton when bound from Havre to New York, but when steaming East-bound she disembarked passengers at Plymouth.

The change has been made on the ground of convenience. The "Normandie's" regular service speed is such that she has been arriving at Plymouth East-bound at between 1 a.m. and 2 a.m., an inconvenient hour for passenger disembarkation. In order to obviate discomfort to the passengers, the vessel has been in the habit of waiting until 7 a.m. to land them. Moreover, it is impossible for the "Normandie" to get inside the breakwater at dead low water, and inadvisable for her to enter when gale conditions prevail.

In the circumstances, therefore, it is thought that instead of waiting four or five hours at Plymouth to land passengers, the vessel might just as well proceed up Channel to Southampton at ordinary speed, which will assure that she will arrive at a convenient hour to put her passengers ashore.

The French Line stress the fact that but for the "Normandie's" speed and the hour of her arrival at Plymouth, they would have preferred to adhere to their original arrangement.

Meeting of Southampton Harbour Board.

Southampton Harbour Board decided, at their December meeting, to undertake a dredging scheme off the Ocean Dock at a cost of £17,500 to give sufficient room for the new Cunard White Star liner "Queen Mary" to be manoeuvred in the lower swinging ground whenever she is using the Ocean Dock for berthing.

The Southern Railway Company, the owners of the docks, have intimated their agreement with the plan and have consented to pay half the cost.

It was stated at the meeting that there were two docks at Southampton capable of berthing the new ship, the Ocean Dock and the new, or Western Dock, and the Cunard White Star Company wanted the option of using either when the "Queen Mary" entered service. At present there was not, it was stated, sufficient turning room for a vessel the size of the "Queen Mary" off the Ocean Dock. The Company had asked for a greater width of 100 ft., but the Board had decided to give more room than that to avoid all risk.

Installation of Radio Beacon Fog Signal.

The past month has seen the inauguration at the Nab Lightship, in the approaches to Spithead, of a radio beacon fog signal for the dissemination of wireless directional bearings for ships.

From Southampton's point of view, this installation is of the utmost importance, for the beacon will enable vessels of all descriptions to reach the eastern approach to Southampton Water with far greater facility than hitherto, and will supply a long-felt need.

Two years ago marine superintendents and pilots met in conference at Southampton to consider the question of the establishment of a beacon, and while the project has been coming to fruition, some of the big ships using the port have utilised a "beacon" of their own, sending a tug to the Nab End Buoy to transmit directional bearings.

Although the Nab is outside the jurisdiction of the Southampton Harbour Board, that body offered to contribute £1,000 towards the cost of the beacon.

Waterways of Canada

The Dominion Bureau of Statistics at Ottawa has just issued a comprehensive study of data relative to the cost (down to March 31st, 1934) of canals, harbours, port facilities, etc.

The expenditures in question have been made through the medium of three Departments of the Government, namely, the Department of Railways and Canals, the Department of Public Works, and the Department of Marine. The first-named has spent, since Confederation, a total of \$355,739,900; the second, a total of \$222,500,000; and the latter, a total of \$328,179,500, making in all \$988,794,100, inclusive of the cost of dredging operations carried out by the Department of Public Works.

The Canadian Government controls, through the medium of the Department of Railways and Canals, six main canal systems, with a total of 507.8 miles, which connect lakes and rivers to form a total waterway of 1,846 miles. The Great Lakes—Saint Lawrence Waterway system and its appurtenant canals—are by far the most important.

Five graving or dry-docks have been built or are owned by the Canadian Government, in addition to which several docks have been subsidised.

The larger Canadian ports, e.g., Montreal, Quebec, Three Rivers, Chicoutimi, Halifax, Saint John, Vancouver and New Westminster, have been administered, until quite recently, by Boards of Harbour Commissioners, appointed by successive Governments, whilst some of the other ports, including that of Toronto, have Commissions on which the Government is represented in conjunction with the Department of Marine. Data are given in the report relative to the expenditure on these ports, traffic, etc.

A copy of the Bulletin in question could be consulted by persons interested in the Reference Library of Canada House, Trafalgar Square, London, S.W.1.

Aden Port Trust

The following are the returns of shipping using the Port of Aden during the month of October, 1935:—

	No.	Tonnage
Merchant Vessels over 200 tons ...	154	680,379
" under 200 tons ...	10	932
Government Vessels ...	117	214,872
Dhows ...	124	3,820
PERIM.		
Merchant Vessels over 200 tons ...	18	71,559

TRADE OF THE PORT.

Article.	Unit	Imports		Exports	
		Quantity.	Value Rs.	Quantity.	Value Rs.
Coal ...	Tons	2,001	51,011	0	0
Coffee ...	Cwts.	8,640	2,73,035	10,520	4,35,433
Grain, Pulse and Flour ...	"	99,598	5,31,812	71,657	3,68,851
Gums and Resins ...	"	2,364	36,247	3,258	74,228
Hardware ...	"	0	45,208	0	32,815
Hides, raw ...	No.	1,983	1,767	9,566	11,089
Oil, Fuel ...	Tons	54,054	12,81,111	0	0
" Kerosene ...	Gls.	32,112	21,036	11,992	7,905
" Petrol ...	"	58,750	55,200	11,464	11,489
Salt ...	Tons	0	0	48,650	5,14,250
Seeds ...	Cwts.	8,096	62,581	1,635	14,121
Skins, raw ...	No.	332,210	1,61,365	692,485	4,91,572
Sugar ...	Cwts.	38,339	2,16,465	31,253	1,78,162
Textiles—					
Piece Goods, Grey ...	Yds.	5,887,844	7,82,990	5,799,240	7,54,129
" White ...	"	663,075	96,102	462,287	73,507
" Printed or Dyed ...	"	1,310,212	2,32,032	1,517,920	3,01,505
Twist and Yarn ...	Lbs.	148,225	68,064	122,100	58,430
Tobacco, Unmanufactured ...	"	846,104	1,59,925	671,580	1,20,706
" Manufactured ...	"	75,376	59,614	28,396	24,165
Other Articles ...	No. of Pkges.	86,121	15,38,837	89,847	7,98,890
Treasure, Private ...	"	0	5,48,285	0	5,45,598
Total ...	—	—	62,22,687	—	48,16,845

The number of merchant vessels over 200 tons that used the port in October, 1935, was 154, as compared with 150 in the corresponding month last year, and the total tonnage was 680,000, as compared with 636,000.

Excluding coal, salt, fuel oil and Military and Naval Stores and transshipment cargo, the total tonnage of imports in the month was 15,100 and of exports 10,900, as compared with 9,200 and 5,900 respectively for the corresponding month last year.

The total value of imports, excluding Government Stores, was Rs.62,23,000/-, as compared with Rs.42,49,000/- for October, 1934, and of exports Rs.48,17,000/-, as compared with Rs.26,81,000/-.

The total value of both imports and exports together was Rs.110,40,000/-, as compared with Rs.69,30,000/- for the corresponding month last year.

Imports during the month were above those for October, 1934, in the case of coffee, grain, pulse and flour, gums and

resins, hardware, seeds, raw skins, sugar, grey, white and printed or dyed piece-goods, and manufactured tobacco; and below, in the case of raw hides, twist and yarn, unmanufactured tobacco and private treasure.

Exports were above those for October, 1934, in the case of coffee, grain, pulse and flour, gums and resins, hardware, raw skins, sugar, grey, white, printed or dyed piece-goods, unmanufactured and manufactured tobacco and private treasure; and below, in the case of hides, seeds and twist and yarn.

The Port of Amsterdam

Statistics for the Port of Amsterdam in regard to number of vessels and tonnage and to goods traffic arrived and sailed, as compared with the corresponding figures of last year, are as follows:—

SEAGOING VESSELS AND TONNAGE.

	ARRIVALS				SAILINGS			
	No.	Per Cent.	N.R.T.	Per Cent.	No.	Per Cent.	N.R.T.	Per Cent.
Nov. 1934 ...	268		401,252		267		409,471	
" 1935 ...	254		350,845		255		333,230	
	-14	-5.22	-50,407	-12.56	-12	-4.49	-76,241	-18.62
Oct. 1935 ...	242		349,904		253		382,452	
Nov. 1935 ...	254		350,845		255		333,230	
	+12	+4.96	+941	+0.27	+2	+0.79	-49,222	-12.87
Jan.-Nov. '34	2,970		4,256,438		2,992		4,290,747	
" '35	2,649		3,835,597		2,673		3,891,213	
	-321	-10.81	-420,841	-9.89	319	-10.66	-399,534	-9.31

SEAGOING GOODS TRAFFIC.

(In Tons of 1000 Kilos*).

	1		2		3		4		5	
	Import	Transit incl. in col. 1	Export	Transit incl. in col. 3	Total col. 1 & 3		Import	Transit incl. in col. 1	Export	Transit incl. in col. 3
Oct. 1934 ...	325,310	75,621	153,928	71,441	479,238		325,310	75,621	153,928	71,441
" 1935 ...	299,800	55,638	172,814	71,955	472,614		299,800	55,638	172,814	71,955
	-25,510	-19,986	+18,886	+514	-6,624		-25,510	-19,986	+18,886	+514
	-7.84%	-26.43%	+12.27%	+0.72%	-1.38%		-7.84%	-26.43%	+12.27%	+0.72%
Sept. 1935 ...	234,349	53,298	132,259	55,478	366,608		234,349	53,298	132,259	55,478
Oct. 1935 ...	299,800	55,638	172,814	71,955	472,614		299,800	55,638	172,814	71,955
	+65,451	+2,340	+40,555	+16,477	+106,006		+65,451	+2,340	+40,555	+16,477
	+27.93%	+4.39%	+30.66%	+29.70%	+28.92%		+27.93%	+4.39%	+30.66%	+29.70%
Jan.-Oct. 1934 ...	3,055,336	596,686	1,379,916	576,605	4,435,252		3,055,336	596,686	1,379,916	576,605
" 1935 ...	2,641,265	577,376	1,442,528	626,615	4,083,793		2,641,265	577,376	1,442,528	626,615
	-414,071	-19,310	+62,612	+50,010	-351,459		-414,071	-19,310	+62,612	+50,010
	-13.55%	-3.24%	+4.54%	+8.67%	-7.92%		-13.55%	-3.24%	+4.54%	+8.67%

* These figures have been taken from the monthly statistics of the Central Bureau, The Hague, Holland.

Tribute to Ship Canal Pioneer.

In Ship Canal House, the office of the Manchester Ship Canal Company, Lord Colwyn, on 13th December, unveiled a memorial to Daniel Adamson, the leader of the Manchester Ship Canal movement.

Lord Colwyn said Adamson was a man gifted amongst his fellows, a typical Northerner of the "old school," expressing his opinion in vigorous North-country speech. He brought to the service of the Ship Canal enterprise a fine fighting spirit, a refusal to accept defeat, and an exuberant delight in trouncing opposition, which earned him much popularity during his lifetime. But this aspect of him should not be allowed to overlay the fine quality of the metal of which Daniel Adamson was made. Adamson's career, indeed, his humble origin, his apprenticeship, his diligent study, and his enterprise in setting up on his own account as a pioneer in his craft, were all true to the "self-help" tradition.

Messages from many parts of the world were read at the unveiling ceremony.

Berthage for the "Queen Mary."

That Southampton was the only port in the Kingdom where vessels of the size of the "Queen Mary" could be berthed, was denied at the December meeting of the Mersey Docks and Harbour Board. Colonel J. G. Beasley, chairman of the Marine Committee, said members of the Board might have read in a recent issue of "The Times" a statement made by the deputy-chairman of the Southampton Harbour Board with regard to the berthing of the "Queen Mary" at that port. He was reported to have said that Southampton was the only port in the Kingdom where vessels of this size could berth. Colonel Beasley said the "Queen Mary" could be safely navigated into the Port of Liverpool, and that she could be berthed in the Gladstone Dock system and dry-docked in the Gladstone Graving Dock. This would not entail any additional dredging or work of a special nature. The length of the "Queen Mary" is 1,018 ft., with a beam of 118 ft. The entrance lock to the Gladstone Dock system is 1,070 ft. long and 130 ft. wide. The Gladstone Graving Dock is 1,050 ft. long, and it widens from 120 to 141 ft.

News from all Quarters

South Africa

UNION ports are already benefiting from the decision of a number of shipping companies and shipping owners whose vessels ply between Europe and the East to send their ships via South Africa instead of through the Suez Canal. Earnings of the Union's harbours for the week ending 23rd November set up a new record of £39,393. This is £9,472 more than was earned by the harbours in the corresponding week of 1934, an increase of 32 per cent. These earnings are also some £5,000 above the average harbour earnings for the year. Part of this big increase may be accounted for by the arrival of shipments of goods for the Christmas trade, and for other seasonal reasons, but it is safe to say that at least £3,000 of the extra earnings are due to traffic diverted to South African ports by the trouble in North Africa. In the first half of November this sharp upward tendency was already evident, the harbour receipts increasing from £32,738 for the week ending November 9th, to £37,813 for the week following. In the course of the three weeks the earnings have increased by £6,655 weekly.

French Morocco

Figures published recently on the position of the two important harbours, Algiers and Oran, reveal that the increase in the traffic in the former has been maintained, whilst in the number of ships using the latter, a slight decrease has been registered, which, however, has not resulted in a corresponding reduction in the amount of cargo carried. The actual shipping traffic of the two ports in January to September, 1935, as compared with the corresponding period of 1934, was as follows:—Vessels entering numbered 3,315, discharging cargoes amounting to 2,896,197 tons, as against 3,578 and 2,900,650 tons. Vessels clearing numbered 3,388, picking up cargoes totalling 4,385,196 tons, as against 3,718 and 4,167,814 tons in the corresponding period of 1934.

Manchukuo

The South Manchurian Railway Company has decided upon an extension of the harbour works in Hulutao, north of Shanhaikwan, and has already concluded a contract with a Japanese company for the carrying out of the work. This project, which will be completed within four years, will result in such an enlargement of the harbour that it will be capable of loading one million tons of cargo annually. The cost of the work, which will commence early in the New Year, is estimated at 3,000,000 yen. After the first year of the reconstruction work, the harbour will already have been made capable of loading 300,000 tons per annum.

In October, 1935, 473 steamers with a total tonnage of 1,320,000 tons visited the harbour of Dairen. This is 52 steamers and 100,505 tons more than the same month of the previous year. Taking the period April to October, 1935, 3,243 vessels with a total tonnage of 9,309,000 tons visited the harbour. This is an increase of 245 steamers and 206,633 tons over the same period of the previous year.

The recently-published figures of the volume of goods handled in October by the Port of Seishin, in N. Korea, reveal its growing importance in the economic life of Manchukuo. Whilst the goods turnover amounted in October, 1934, to 38,391 tons, it increased in the same month of 1935 to 63,600 tons. The total amount of goods imported and exported for the ten months, January to October, 1935, are given as 541,324 tons, as compared with 483,279 tons in the corresponding period of the previous year.

U.S.A.

The shipping visiting the harbour of New York during the months April to September, showed the usual seasonal increase. The busiest month was August, when 485 vessels with 2,410,667 tons entered, and 521 with 2,583,367 tons cleared the port. A comparison with the corresponding period of the previous year reveals the fact that the amount of foreign shipping using the harbour has risen.

The harbour authorities of San Francisco recently placed a proposal for the construction of a free harbour before the Foreign Trade Zones Board of the Ministry of Trade. Trade circles are, in the main, opposed to the scheme in its present form, asserting that before it can succeed in attracting foreign shipping radical changes will have to be made in the Foreign Trade Zones Law. The most essential alteration, it is pointed out, will be a provision in the law permitting the establishment of a large group of foreign industries in the free harbour area. If the port could thus be made a basis for industrial production, the amount of goods handled might be expected to increase. Raw materials would have to be imported, and finished products exported to the Latin American countries and overseas generally.

Belgium

The Zeebrugge harbour authorities have drawn up an important harbour improvement scheme. It is intended to build a quay wall, and a tender of 2,600,000 francs has already been accepted for the work.

The volume of shipping using the harbour of Antwerp in the month of November amounted to 952 vessels with 1,894,796 n.r.t. This compares with 866 vessels and 1,633,868 n.r.t. in the same month of the previous year.

Poland

The sea-going traffic visiting the Port of Gdingen, after declining substantially in October, increased in the following month to the same figure as in September. The November figures are 463 sea-going vessels with 426,000 n.r.t., as against 367 and 367,000 n.r.t. for October.

In the first eleven months of 1935, the shipping using the port amounted to 4,167,000 n.r.t., as compared with 3,800,000 n.r.t. in the corresponding period of the previous year.

Holland

The traffic of the Port of Rotterdam in November showed a substantial increase on the previous month, and was greater than the average of the first ten months of the year. The number of vessels entering the harbour was 679, as against 655 in October, and 685 in November, 1934. 638 vessels cleared the harbour, as compared with 614 in the previous month, and 585 in the same month of the previous year.

Dock and Harbour Authorities' Directory, 1936.

The Dock and Harbour Authorities' Directory for 1936, which is published at 1s. 6d. net, will be ready about the middle of January. This Directory, which is revised each year, contains the names of members and principal officials of Dock and Harbour Authorities throughout the world, and is a useful medium for Port Officials who wish to exchange correspondence with any particular member or official of any other port.

Manchester Ship Canal Company.

The following staff changes are officially announced by the Manchester Ship Canal Company:—Mr. W. Browning, Traffic Superintendent and Harbourmaster, who for many years has had charge of the administrative work of the Ship Canal and Docks, will retire from the Company's service on February 28th next. Mr. F. W. Way, at present Assistant Traffic Superintendent, to be Docks Manager, and Captain F. Howard, D.S.C., R.N. (Retd.), at present Assistant Harbourmaster, to be Harbourmaster. Mr. A. F. Keen, hitherto manager of the Company's London Office, to be Traffic Manager, with charge of negotiations for obtaining Ship Canal traffic.

The New President of the Manchester Employers' Association.

Mr. Cecil Bentham, Chairman and Managing Director of Henry Simon, Ltd., has been elected President of the Manchester District Engineering Employers' Association for 1936. The Presidency of the Employers' Association is looked upon as the most important appointment in the Engineering industry in each district, and we should like to congratulate Mr. Bentham upon the honour which has been accorded to him.

Mr. Bentham has been Vice-President of the Association for the past two years. He is also a member of the Councils of the Institution of Mechanical Engineers, and of the British Engineers' Association. He has been President of the Manchester Association of Engineers, Chairman of the North-Western section of the Institution of Mechanical Engineers, and Chairman of the Liverpool and Manchester branch of the Institute of Transport.

Mr. Bentham is a Member of the Institution of Civil Engineers, Member of the Mechanical Engineers, and Member of the Institute of Transport. He succeeded Sir Ernest Simon as Chairman of the firm of Henry Simon, Ltd., in January, 1934.

Cranes for South Africa.

The South African Railways and Harbours have placed an order with Messrs. Babcock & Wilcox, Ltd., Babcock House, Farringdon Street, London, E.C.4, for fourteen 4-ton electric portal luffing jib cranes for Port Elizabeth Harbour. These cranes will have a maximum radius of 60 ft.; height from rail level to the highest position of hook, 72 ft. 6 ins.; depth of lift below rail level, 58 ft.; span of track 17 ft. 6 ins. centres of rails.

An order has also been placed with the same firm to supply twelve 4-ton electric portal luffing jib cranes for Table Bay Docks. These cranes will have the same dimensions as those for Port Elizabeth Harbour with the exception that the span of track will be 13 ft. 6 ins. centres of rails.

The Port of Colombo

Dredging.

THE dredger "Sir William Matthews" was engaged in dredging the area west of the Guide Pier until October 19th, when she was laid-up owing to shortage of staff and consequent provision of relief to officers in the Mechanical Branch.

A total quantity of 22,750 cubic yards of dredged material consisting chiefly of mud and clay was removed and deposited at sea during the month.

Vessels passing through Lake to Harbour Canal.

The number of lighters, motor launches, steam launches, jolly boats, barges and punts, sailing boats, water boats and rafts which passed through the Lake to Harbour Canal in October, 1935, was 684, as compared with 646 in October, 1934. The total number of vessels which passed through the Lake to Harbour Canal in the first ten months of 1935 was 6,212, as compared with 8,407 for the corresponding period of 1934.

Goods Traffic through the Lake to Harbour Canal.

The goods traffic passing through the Lake to Harbour Canal during October, 1935, amounted to 289 tons of imports and 5,862 tons of exports, as compared with 861 tons of imports and 5,585 tons of exports in October, 1934. For the first ten months of 1935, 7,240 tons of imports and 43,273 tons of exports passed through the Lake to Harbour Canal, as compared with 18,694 tons of imports and 59,538 tons of exports for the corresponding period of 1934.

Liquid Fuel Imports.

The quantity of liquid fuel imported at Colombo during October, 1935, amounted to 21,697 tons, as compared with 29,081 tons in October, 1934. During the first ten months of 1935, 258,253 tons of liquid fuel were imported, as compared with 243,015 tons for the corresponding period of 1934.

Liquid Fuel Bunkers supplied to Steamers.

The quantity of liquid fuel supplied to steamers in October, 1935, was 50 ships bunkered with 24,020 tons, as compared with 52 ships bunkered with 23,398 tons in October, 1934. For the first ten months of 1935 the total number of ships bunkered was 424 with 225,321 tons of liquid fuel, as compared with 425 ships bunkered with 217,061 tons for the corresponding period of 1934.

Coal Imports.

The quantity of coal imported during the month of October, 1935, was 15,365 tons, as compared with 20,920 tons in October, 1934. Altogether, 348,437 tons of coal were imported for the first ten months of 1935, as compared with 333,891 tons for the corresponding period of 1934.

Coal Bunkers supplied to Steamers.

The number of steamers bunkered during October, 1935, was 71 with a total of 17,757 tons of coal, as compared with 76 steamers with 20,302 tons of coal in October, 1934. For the first ten months of 1935—706 steamers were bunkered with 198,606 tons of coal, as compared with 673 steamers with 190,500 tons in the corresponding period of 1934.

Number and Tonnage of Vessels Entered and Cleared.

The number and tonnage of vessels other than country craft engaged in trade which entered and cleared at the Port of Colombo during the periods specified, was as follows:—

	Vessels engaged in Foreign Trade			Vessels engaged in Coasting Trade		
	No.	Tons		No.	Tons	
(a) ENTERED						
During October, 1935	208	994,619		12	37,513	
During October, 1934	233	1,093,519		2	4,661	
During October, 1933	218	1,022,189		5	12,254	
During the 10 months ended October, 1935	2,194	10,100,487		63	178,272	
During the 10 months ended October, 1934	2,198	10,068,955		36	107,523	
During the 10 months ended October, 1933	2,069	9,438,577		39	106,126	
(b) CLEARED						
During October, 1935	219	1,037,715		3	9,203	
During October, 1934	223	1,059,097		5	16,316	
During October, 1933	220	1,022,472		2	7,740	
During the 10 months ended October, 1935	2,242	10,226,616		21	66,936	
During the 10 months ended October, 1934	2,202	10,077,062		31	104,496	
During the 10 months ended October, 1933	2,086	9,472,044		20	65,847	

Tonnage of Imports and Exports.

Tonnage of imports and exports at this port during the periods specified:—

		During October		
		1933 Tons	1934 Tons	1935 Tons
Imports (excluding Coal and Oil)		66,828	90,435	94,533
Exports (" ")		63,170	80,865	51,125
Total	...	129,998	171,300	145,658

During the ten months ended October:—

		1933 Tons	1934 Tons	1935 Tons
		694,716	854,934	856,170
Imports (excluding Coal and Oil)		517,709	644,326	477,717
Exports (" ")		517,709	644,326	477,717
Total	...	1,212,425	1,499,260	1,333,887

Oil Facilities Receipts.

The oil facilities receipts for October, 1935, were Rs.38,905, as compared with Rs.80,041 during October, 1934. The total receipts for the first ten months of 1935 were Rs.864,970, as compared with Rs.787,945 for the corresponding period of 1934.

British Columbia.

The Canada-United States Trade Treaty, which came into force on January 1st, reduces, among other things, the duty on B.C. timber by one-half. Although at first glance this might seem to re-open the Province's largest market, the effect is largely nullified by the fact that it applies only to a comparatively small quota. There will thus be no interference with shipments of timber to the United Kingdom, which now forms so important a part of the industry's export trade. In this connection the announcement that the Seaboard Lumber Sales Company, Ltd., of Vancouver, the central export sales organisation for the British Columbian sawmills, is to open a London office, is a further indication of the permanent place which the U.K. market has now taken in the B.C. timber business.

The producing mills of the Province are now running up to 80 per cent. of normal capacity. The foreign water-borne lumber shipments in September amounted to 76,776,115 ft. BM, as compared with 74,000,000 in August, and 56,226,609 ft. BM in September, 1934. Exports to the United Kingdom show a marked increase. According to latest figures, the capital at present employed in the shape of logging railroads, plant, and equipment in the timber industry of the Province totals \$125,000,000, and the number of employees in woods operations and in lumber-manufacturing industries in Vancouver and vicinity is 17,500.

Vessels Constructed by Wm. Simons & Co., Ltd.

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Vessels Constructed	Gross Tonnage	I.H.P.	Owners
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Pontoon ...	12	—	Colonial
Diving Bell Barge ...	180	200	British
Portable Suction Dredger ...	7	150	Colonial

Besides the above, a large quantity of dredging machinery was also supplied during the year.



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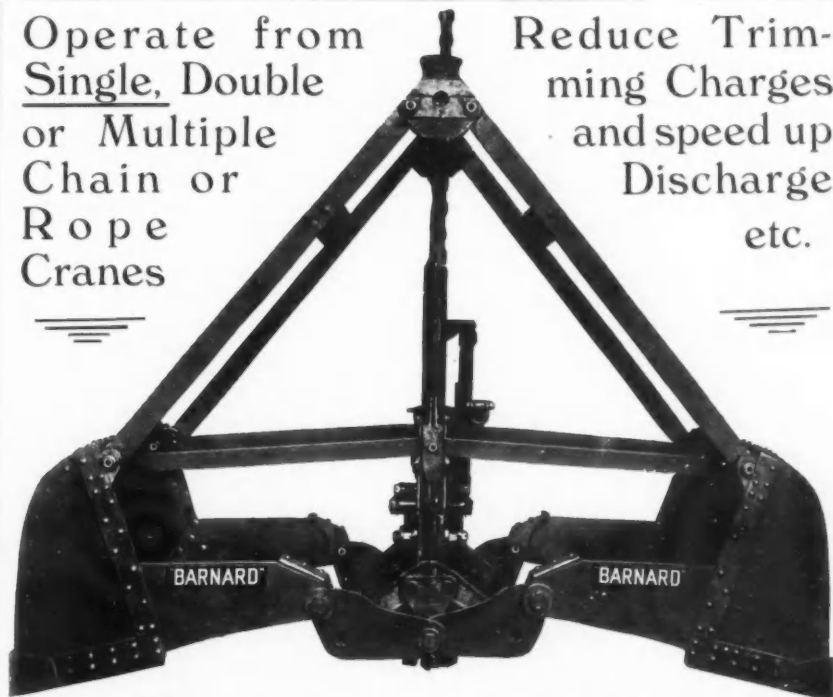
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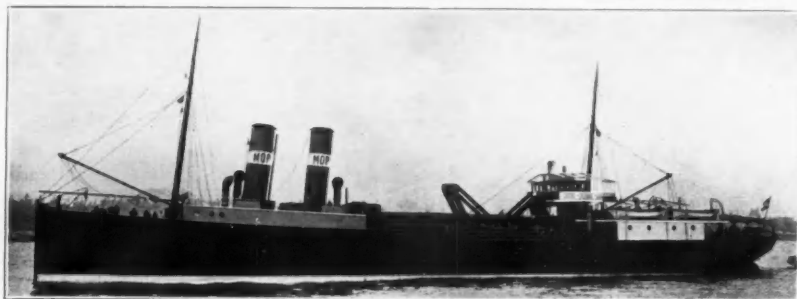
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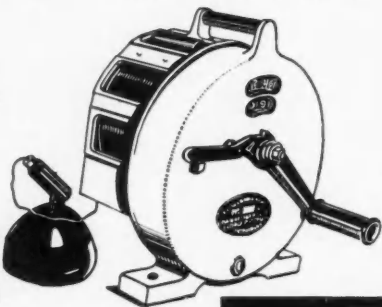
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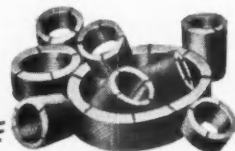


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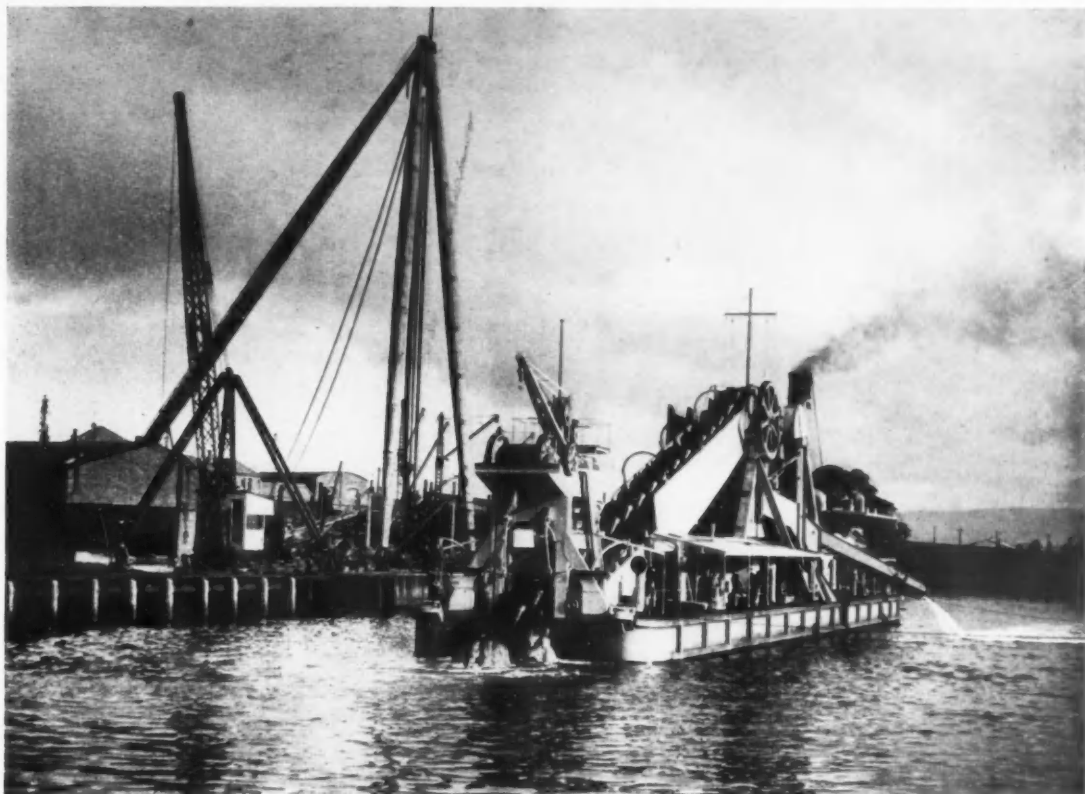
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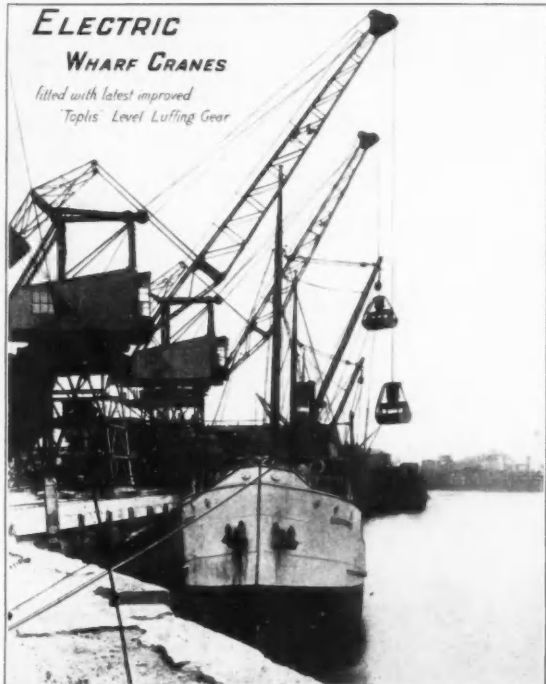
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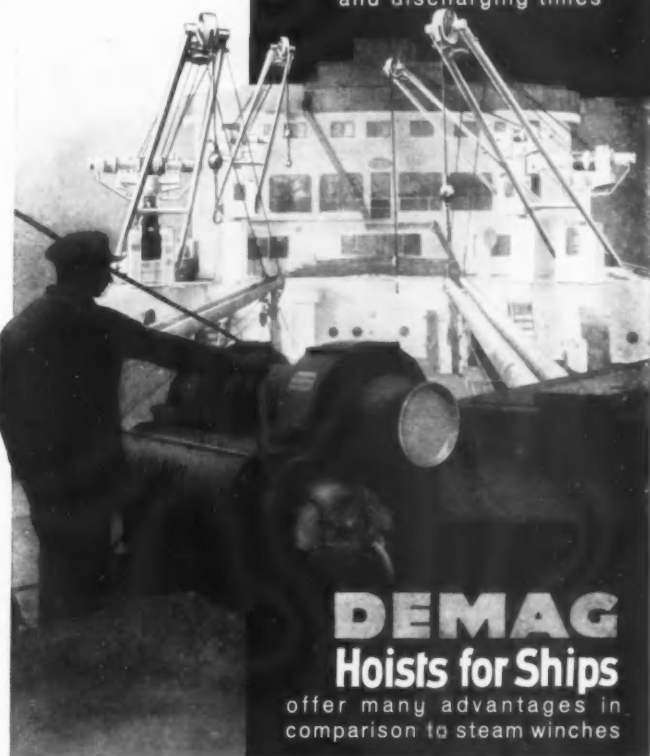
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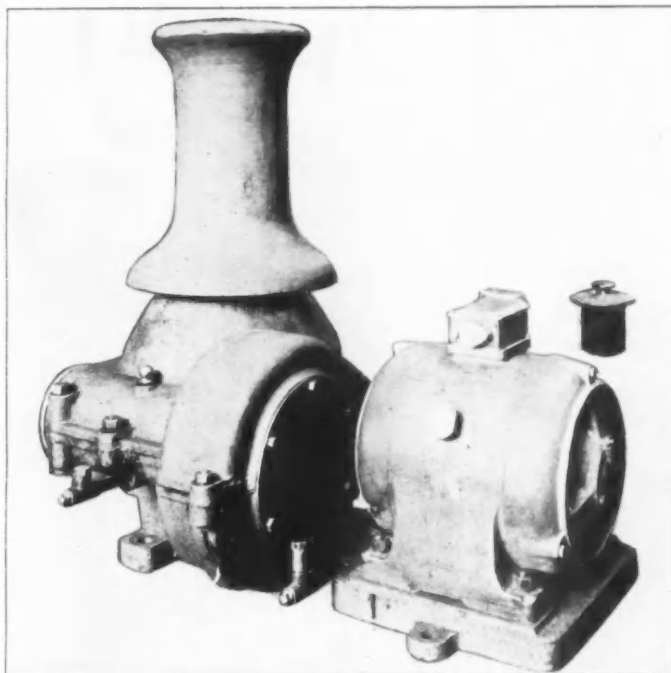
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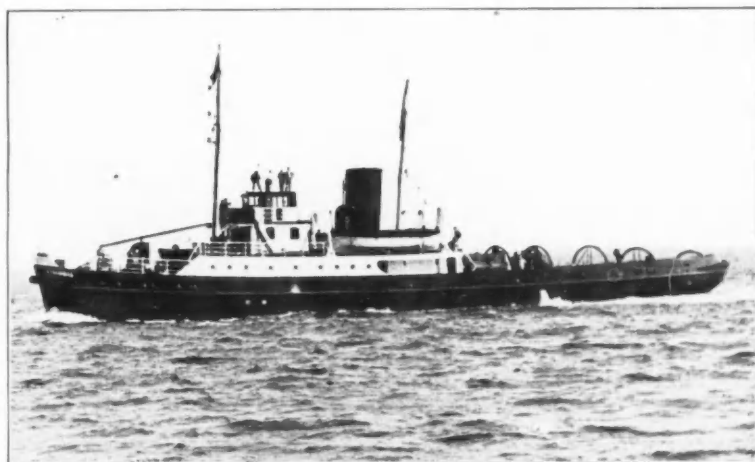


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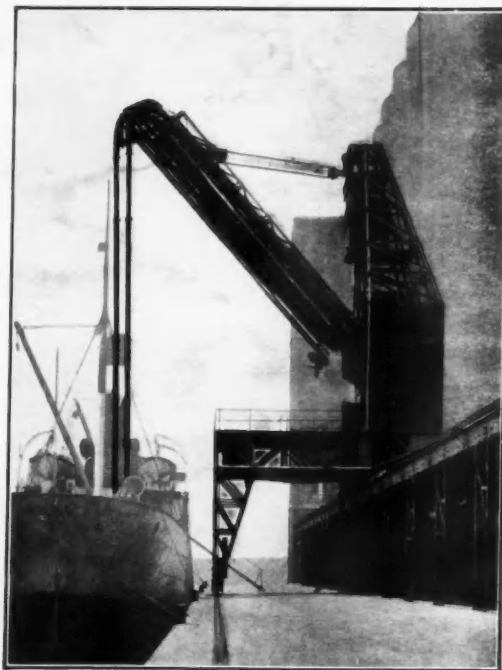
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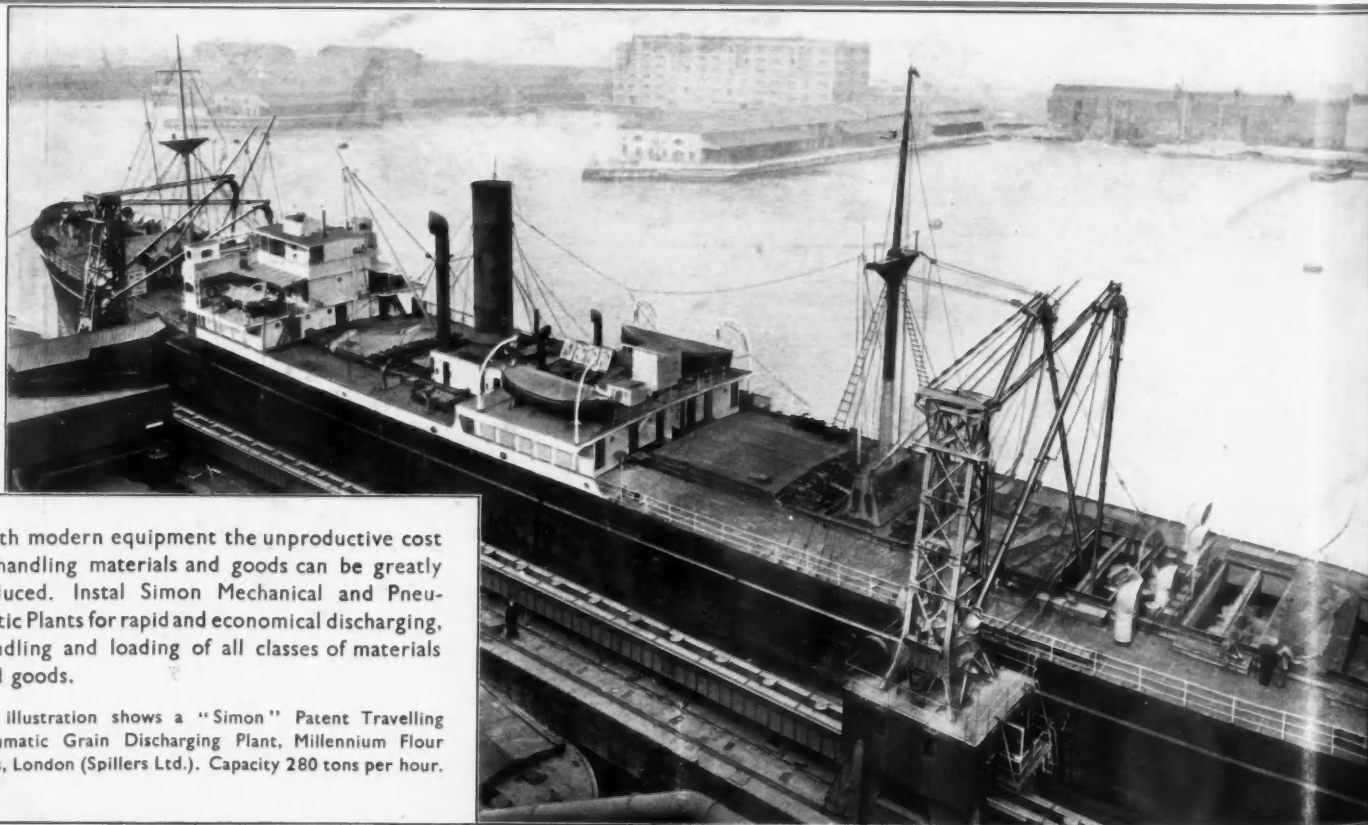
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